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Miss Newman  
Geo. M. Darrow

6209 - 1913?  
**Berry, Small Fruit  
and Vegetable**

**Introductions**

NOV 16 1928

U.S. Department of Agriculture.  
**Winter Rhubarb Growing**

*The Greatest Money Crop  
in California*

**\$2,000 per Acre Can be Made Where Conditions  
Are Favorable**

*The Pioneer Fruit Co. of Sacramento, Cal.  
Shipped East during March and  
April, 150,000 Boxes*

**Expect to Begin Shipment in November, this Year, and Ship  
Double the Above, if Obtainable**

BY

**J. B. WAGNER**

BERRY AND PLANT SPECIALIST

**PASADENA, CALIFORNIA**

Dear Sir:

In reply to your query pertaining to Rhubarb, I beg to say: Our third edition of "Rhubarb for Profit," comprising 7000 copies, due to unprecedented inquiry for same, is exhausted. This booklet is so fully appreciated by the public we may decide to make another issue of same in the near future, revised and down-to-date.

We have entered your name on our mailing list, and should we do so, will mail you a copy of same.

In the meantime, we herewith give you detail, which covers the main points pertaining to culture of Rhubarb, and wish to say, if your land and climatic conditions are favorable, there is nothing you can plant that has or will pay so well. Others as well as ourselves have harvested crops up to \$2000 per acre per annum. You can do equally well.

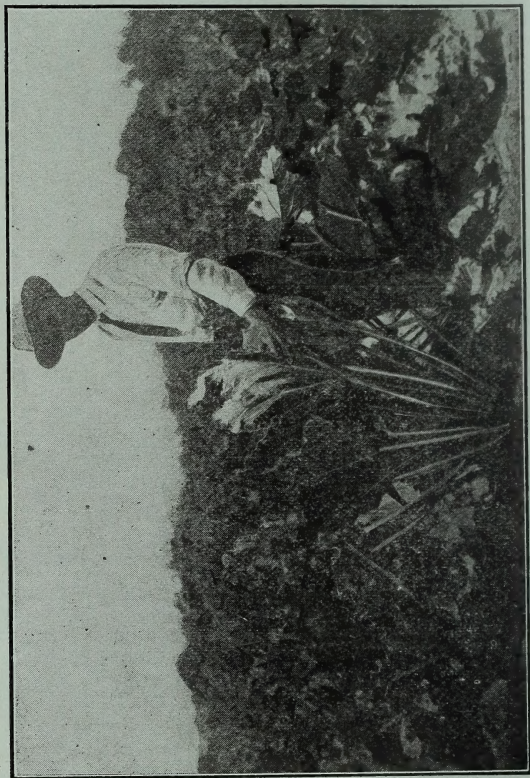
Note prices on our Giants and Giant seedling. These have cost in the past as high as \$5.00 per plant. We have now over 20 acres planted to these. Our land is all occupied, hence we are making special low price to move surplus plants. They are going rapidly at these figures and probably will never be cheaper, hence do not delay, but plant at once. They should more than pay for themselves in one year; this cannot be said of any other plant or tree you can put out.

If you cannot afford the improved Giant divisions, plant Giant seedling. They cost no more than common plants and are hardy anywhere, and twice as productive as any of common sorts.



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Partial View of Wagner's Giant in full bearing, yielding 30 lbs. per plant per picking

# Winter Rhubarb Growing

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BY J. B. WAGNER

RHUBARB SPECIALIST

PASADENA, CALIFORNIA



## CRIMSON WINTER RHUBARB

Burbank says, one of the most surprising facts which the careful observer notes is the great length of time required to familiarize growers of both fruits and vegetables, with any new, epoch-making introduction.

Crimson Winter Rhubarb, introduced in 1900, received the same slow recognition, though it proved all and more than was claimed for it. No vegetable ever introduced has proved so profitable as Winter Rhubarb.

Rhubarb is the first vegetable we have from the ground in spring. It has a host of friends who fully appreciate its merits, while those who have land and do not grow it are losing one of Nature's choicest and healthiest vegetables. It is the easiest plant to grow of all the perennials. A bed once established will last for 25 years. A half dozen plants will supply a large family during the season, which with Winter Rhubarb is 52 weeks each year. (Common sorts, 12 weeks.)

The great value of Rhubarb as a vegetable lies mainly in its earliness. A vast amount of time and labor has been spent in efforts to originate a variety producing stalks even a few days in advance of other early sorts. These efforts have met with fullest reward, as Winter Rhubarb will produce marketable stalks fully six months earlier than any other sort.

This valuable and wonderful plant was introduced by Luther Burbank of Santa Rosa, Cal., who is known the world over as the Wizard of Horticulture, having produced more new fruits and plants than any other living man.

Winter starts to grow vigorously by October and produces stalks continually until after common varieties make their first appearance, some six months later. If kept moist it produces stalks abundantly at all seasons; it is, in fact, absolutely perpetual. Mr. Burbank considers this the greatest and most valuable plant ever introduced.

Stalks of Burbank's Crimson Winter are of medium size, averaging 12 to 18 inches in length, about one inch in diameter, of a beautiful color.

In quality it is simply superb, fully equal to the finest berries for sauce and pies, having none of the earthy flavor so noticeable in ordinary sorts; it is really a combination of fruit and vegetable coming at a time when such things are unobtainable at any price. The skin is so thin and tender it is not necessary to remove it. The flavor is sprightly and refreshing, combining that of the Raspberry and Strawberry, but greatly superior to either as a cooked fruit.

Its fixed habits of winter growth makes it especially adapted to growing in greenhouses or under glass for winter use in cold climates; all that is necessary is to keep the temperature above freezing point.

Burbank says, for growing in California for shipping East, it has proven to be more profitable than anything the soil produces. To this I heartily agree.

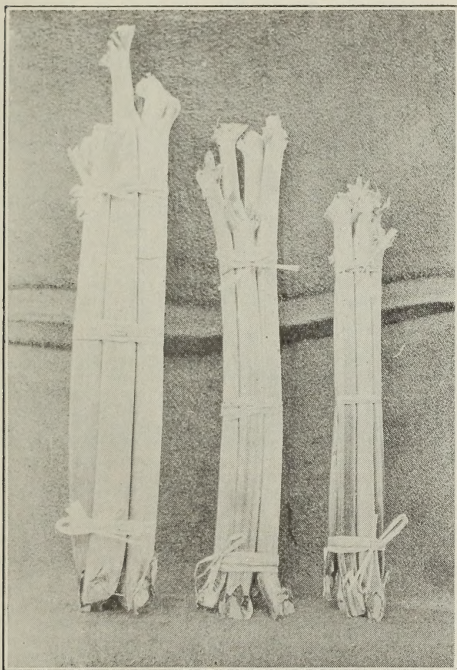
Early recognizing the wonderful future of WINTER RHUBARB, I procured in the fall of 1901, 100 plants from Burbank. Later, finding it was more than Burbank claimed, and demand for seed and plants, both home and abroad, was greater than I was able to supply from these plants, in the fall of 1902, I got another 1000 from Burbank. For these I paid fancy prices; but, recognizing the advantages to be derived from having pure stock for propagating purposes, I considered them cheap at any price, and one of the best investments I ever made. Planters will do well to note these facts, as seedlings once or twice removed from original stock are apt to be very disappointing, owing to its tendency to deteriorate in quality. As a money maker it has proven way ahead of my most sanguine expectations.

We especially invite intending planters to call and see for themselves what can be done. Usually one irrigating is ample during summer. However, one must be governed by soil conditions. A thorough irrigating in September or early in October stimulates it to fullest capacity during winter months when it is in great demand, prices at this time ranging from 5 cents to 12 cents per pound on the coast, and 10 cents to 20 cents per pound in large Eastern centers, to which point it can be cheaply and economically shipped either in full carlots or with a mixed car of fruit or vegetables such as are daily going forward from our vegetable growing districts at that season of year.

Los Angeles has become a good market; they now use about ten cars per week during late spring and winter. No doubt it will be some time before we will be able to supply home demand, while the demand in the East will probably never be supplied owing to the fact that the area where WINTER RHUBARB can be successfully grown is limited.



While in the East, I visited the leading market sections in 33 States, Canada and Mexico. A surprising fact I noticed: In July and August, when all other fruits and vegetables were abundant,



Wagner's Giant Burbank's Giant Crimson Winter.

rhubarb was handled in carload lots at from 2c to 3½c per lb., and sold readily earlier in the season at from 5c to 15c per pound. Every grower I talked with claimed to realize from \$500 to \$1000 per acre on rhubarb. It is now grown in large fields where a few years ago it was only grown in small patches. Growers and dealers assured me that if we could grow it in winter the market would be unlimited and prices high.

It is said to be a cross of Early Australian Crimson on our wild desert rhubarb of California, from whence it gets its winter habit of growth. The root has the appearance of a long, tapering parsnip, similar to wild rhubarb, usually from 3 to 6 feet long; a deep feeder. It is almost impossible to successfully divide the crowns, so commonly done with common sorts, the reason being it is always full of sap, and a tendency to decay when divided.

Best results are obtained from medium size plants. These are the only sort we recommend and sell, as divided crowns are almost worthless. NEVER PLANT SEED OR SEEDLINGS FROM ANY OTHER THAN ORIGINAL STOCK. It seems to deteriorate rapidly when far removed. To produce best results, one must keep all seed stems cut off, as it has a great tendency to seed.

With due care it can be successfully transplanted at any time of year except in excessively hot sections. Even in our hot interior with proper care and irrigation, it can be planted in June and good crops assured the following winter.

At present demand for reliable plants is greater than the supply, owing to the fact that it is very hard to propagate. It will be some time before this will be equalled.

Set plants  $1\frac{1}{2}$  by 5 feet. Recent experience indicates this is best distance to plant;  $1\frac{1}{2}$  by 5 feet requires 5,800 per acre. By planting close in row it causes stems to grow longer and more tender and in no way is injurious, while more and redder stems are produced from same area.

Rhubarb is as easily and cheaply gathered as apricots or peaches; hence at same rate per ton is a much better paying proposition, even the first year, than any deciduous orchard when in its prime. It delights in any good vegetable soil that produces good crops of onions, sweet potatoes, melons, etc. Excessive heat seems to have no ill effect on it once it is established, if properly cared for.

Plants should be set same depth as they originally grew, watered immediately followed in a couple of days with another irrigation, then keep soil in well-tilled and moist condition. Irrigate as often as is necessary to keep from drying out.

A liberal use of manure, thoroughly mixed with the soil, is greatly beneficial and sure to repay many fold for trouble and money invested. Repeat application every two years. Barn-yard manure or blood-fertilizer or nitrate of soda preferred.

As a beverage it is especially refreshing. Cut into small pieces, sprinkle with ginger, cover with boiling water and permit to stand without cooking till cool. Use a cupful to a quart of water. It is also claimed to make one of the finest grades of light wines. There is no waste to it—all tenderness. The canneries use it without stringing, simply cut into suitable pieces for cooking.

It requires about one-third less sugar for sauce and pies than ordinary sorts. It makes fine dessert when baked. Bake slowly in earthen dish, sprinkle lightly with sugar, and just cover with water. For making jelly it is unsurpassed; it is superior to Loquat or Roselle.



Rhubarb ready for the market.

Rhubarb has great medicinal value. It is found in every drug store throughout the land. Grow it yourself and get a better article. No family can afford to be without it as it saves many a doctor bill by keeping the system in order.

A temperature of 15 degrees will not injure plants but is apt to injure the crop then ready to gather by causing it to become pithy.

The plants we now offer are best size for successful planting and will produce a good crop of marketable stems within six months.

We do not book and hold orders for future delivery unless at least one-third purchase price accompanies order. We are confident that parties who plant now will reap a golden harvest and be assured of quick returns. Average yield about 10 to 15 tons per acre, according to conditions, care, etc. A thorough investigation is earnestly desired. It will convince anyone of the claims above made. It does not thrive in shade of large trees, but does well in young orchards. We now offer these in two grades and the best plants ever offered on the Coast, field grown and sure to give satisfaction. Price within reach of all.

## BURBANK'S GIANT WINTER NEW

Introduced for the First Time from His Grounds  
at Santa Rosa in 1907.

This Giant Rhubarb is just like the now famous Crimson Winter except it produces stems fully twice as large, and does not tend to seed so readily. It produces leaves of enormous size, often measuring three to four feet across. In speaking of this when I was at Burbank's home in Santa Rosa, he said it was a sport from the common Crimson Winter and will not come true from seed, the seedlings reverting back to the original type; hence is increased only by subdivision of the roots. This makes it exceedingly hard to propagate, hence will make it scarce and high priced for years to come. Those who plant now will reap a golden harvest. I predict, and believe, that in three to five years hence the plants will command a greater price than we are now offering them at. The supply cannot possibly equal the demand, once its superior merits are known. Its great stalks are produced in abundance the year round, fine crimson in color, tender and highly flavored like a berry. In speaking with Mr. Burbank of this, he says it is of inestimable value, and under same conditions will produce stems fully twice as large as common Crimson Winter from which it is a sport. He considers this the most valuable introduction he has ever offered, and says anyone having the soil suitable for rhubarb culture, who does not plant all he is able to secure of this, is surely making the greatest kind of mistake. To fully appreciate the above opinion as expressed by one of Mr. Burbank's standing, you must bear in mind he has a world-wide reputation at stake, and no plants to sell; hence, if it was not worthy of high recommendation he would not endorse it so highly. He sold the entire stock of these to Mr. J. L. Childs, the seedsman, of Floral Park, N. Y. We have secured the entire stock of this variety from Mr. Childs and are propagating it on our grounds in Pasadena.

Plant in any good deep vegetable soil well enriched by any good fertilizer (cow manure or grape pumice preferred), thoroughly mixed in the soil and kept thoroughly cultivated and irrigated as often as necessary. From what we have seen of this wonderful plant we can but endorse what Burbank says of it, and advise planting extensively at once, as it is bound to prove a money maker.

**Wagner's Giant Amber.** (New). Offered for the first time. It is a cross of Burbank's Crimson Winter and the well-known variety, Golden Syrup, a variety I got from the East several years ago. The chief claim of the Golden Syrup Rhubarb to its popularity was, as its name implies, due to the beautiful rich orange or lemon colored sauce it



made, so unlike the usual greenishness so common with most of the old style rhubarbs. It was supposed to be a cross on the yellow dock, from whence it got its color.

In making this cross of Crimson Winter on Golden Syrup I was, to say the least, exceedingly lucky, as I was able to retain the color of the Golden Syrup to a great extent and add the winter habit, together with the fine flavor of the Crimson Winter, thus producing a variety which is a true winter grower and with flavor as fine as best Crimson Winter, and the stems when cooked making a sauce almost the color of ripe apricots, which is preferred by a few to even the Crimson Winter color. The flavor is identical; occasionally a stem has a little trace of red on it. This seldom appears in the sauce when cooked; should it do so it can easily be remedied by cutting end of stem off and removing a little of the skin at lower end of stem; otherwise do not skin or peel, as it is not necessary. As to the general description, it is the same as Burbank's Giant Winter Rhubarb, stems twice as large and productive. Single stems often weighing over one pound and yielding at one picking 30 pounds to the plant, and it does not seed readily like common Winter Rhubarb. Altogether it is certainly worthy of a place on the table along with our choicest fruits and vegetables. One having a dish of this to set before their guests will have something to be proud of. I have gathered from this sort in eleven months from planting at the rate of over 30 tons per acre. My stock of this is limited.

**Wagner's Giant Crimson Winter.** Originated on my own grounds in 1903. A hybrid, being a cross on the common Crimson Winter (from whence it gets its winter habit of growth) and the Australian Crimson (called Lorenzo and Strawberry) from whence it gets its immense width of stem. The Crimson Winter is noted for length, and Lorenzo for shortness and thickness of stem. In this cross I have been able to combine these two qualities, which have resulted in producing a true winter grower of enormous size, stems often weighing  $1\frac{1}{4}$  pounds each. I have picked at one time from a single plant sixty full-grown stems that weighed 30 pounds, or one-half pound per stem. This variety has all the good qualities of the Crimson Winter; does not run much to seed—hence they must be propagated by subdividing the crowns. This is a slow, tedious task; hence prices of this sort will always remain high. By careful, intelligent handling these can be subdivided every second year into about twenty plants each. Parties who get plants now will surely reap a rich harvest as it is bound to take the place on the market now occupied by other winter sorts as soon as plants can be secured. The stems are as tender as any known plant, do not have to be

peeled, are not coarse or stringy, cook readily, are of good color but not so red as Crimson Winter. The plant grows vigorously at all seasons of the year, but is at its best from October to June. The average size of stem is about two feet, and the weight one-half pound. This variety is about twice



Showing long tapering habit of root of Winter Barb; also stems of Barb weighing one pound each.

the size of Burbank's Giant Winter and four times the size of the smaller sorts of rhubarb. In 1907 a representative sent from the Department of Agriculture at Washington, in looking over my work, said he had never seen anything to equal it in the way of rhubarb. He also stated that he believed he had seen rhubarb growing in every country in the world where it could be grown.

Coming from this source, I consider this a great recommendation. About this time one of the leading seedsmen and nurserymen in the East was at my place. He offered me \$3000 for the plants I then had, just sixty, or \$50 each. In August, 1907, I refused \$100 for a single plant. I had not intended to sell any of these plants until I had my entire place set out with them, which I now have—about 20 acres in all. Can now supply plants at reasonable price.

**Wagner Giant Seedling**, being grown from seed from our famous Giant, yields up to 20 to 25 tons per acre, offered now for the first time. It is a strong, rapid grower and very much more productive than the common Crimson Winter, unequalled except by our high-priced improved Winter variety. It comes on soon after planting and unless the ground is frozen it keeps on growing constantly. Stems proving twice as large as the common Crimson Winter, being hardy in any climate, will grow and yield handsome returns where the common Crimson Winter varieties would be a failure. It is unsurpassed in either flavor, texture, size or hardiness, except by our improved Giant, grown from subdivisions. The price of this is the same as the common Crimson Winter, yields twice as much as any of the old-time sorts, and is much more profitable. To parties who feel that they cannot afford to invest in the high-priced Giant strains we strongly recommend this in preference to the common Crimson Winter, and we feel assured it will prove a great money maker. One of my customers who put out a couple of acres in June, had a crop of over seven tons per acre by the following November and two heavier pickings to come later in the season.

While we make a specialty of growing WINTER for both plants and market, and recommend it where it can be successfully grown, we also grow for our planting trade the following well-known varieties:

**Improved Strawberry (or Lorenzo)**, being the best early spring sort adapted to the Coast sections and extensively grown in rhubarb sections around Gardena, San Lorenzo and other points where the common sorts are grown extensively for spring and summer market and shipment; size of stalk medium; tender, pale crimson, delicious flavor.

**Linneaus**. Early, large, tender, fine flavor, requiring very little sugar; earlier and more profitable than Victoria. A favorite among truck gardeners where Winter sorts are unknown.

**Victoria**. One of the old standards, grown extensively in England and parts of the United States; a favorite with many. Stalks large, pale green splashed with red; flavor fine; not a long season cropper and in hotter sections very short-

lived and uncertain to give satisfaction, nor nearly so prolific as Linneaus and Lorenzo. We do not recommend large planting of this variety, especially on the Pacific Coast.

We have aimed in above brief treatise to answer all of leading questions commonly asked by intending purchasers. In case there is any further information regarding soil or other conditions desired on the subject turn to page 45 of this book and you will no doubt find what you wish to know.



Two rows of Barb 4 months old, same care and attention, except that the row to the right had a generous application of cow manure.

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### PRICE LIST.

**Crimson Winter and Wagner's Giant Seedling**—First size, 35c each; \$2.00 per doz., \$10.00 per 100, \$50.00 per 1000; second size, 25c each, \$1.50 per doz., \$6.00 per 100, \$40.00 per 1000; 5000 at \$30.00 per 1000.

**Strawberry (or Lorenzo), Linneaus, or Victoria**—Medium size, 15c each, \$1.00 per doz., \$4.00 per 100, \$30.00 per 1000. Special price on large orders.

**Burbank Giant Winter**—50c each, \$4.00 per doz., \$20.00 per 100, \$150.00 per 1000.

**Wagner's Giant Crimson Winter, and Giant Amber Winter**—75c each, \$7.50 per doz., \$50.00 per 100.

Five hundred at 1000 rate; 50 at the 100 rate; 6 at the dozen rate, on all sort.

Wagner's Giant seed, \$4.00 per  $\frac{1}{4}$  lb., \$7.00 per  $\frac{1}{2}$  lb., \$12.00 per lb. We sell nothing less than  $\frac{1}{4}$  pound seed.



# SPINELESS CACTUS WILL CAUSE YOU TO LAUGH AT DRY SEASONS.

## SOME OF ITS HISTORY.

Spineless cactus is not a new creation. There is nothing new under the sun. It has only been improved like the apple, peach and other products of the soil. There is no doubt in the remote past it was as plentiful as the spiny sorts now are, but owing to the fact that it was not protected with spines it was sought after and ravenously devoured by rabbits, deer, buffalo and other wild animals then infesting our Western States and Mexico, the native home of the cactus family. Hence it became almost extinct before its great value became recognized, and to Luther Burbank, more than to any other man, should be given the credit of bringing to the attention of our progressive stock growers and dairy men of the Western States its great value as a stock food and forage plant.

The fruits of the cactus have long been used extensively as food and are the principal source of food for millions of human beings in Southern Europe, North Africa, Mexico and other lands for a great portion of the year.

When the mission fathers settled in Mexico they found several species growing wild and sent some of these home to their native land, where it found congenial climatic conditions and where it has proved of vast commercial value to both man and stock. In Italy the fruit is one of the staple articles of food. Either cooked or raw it makes one of the finest of jellies, jams or canned fruit. This country was slow to see its advantages, the people believing it fit only for Indians. This is now changed.

That millions of acres of desert land overgrown with cactus may be made a source of large revenue seems almost incredible, but stranger things have happened.

## VALUABLE AS FEED.

Cultivate for fruit and as food for farm animals, including poultry. Spineless cactus will produce, when grown under favorable conditions on well cultivated soil, in California climate, from 150 to 200 tons of green feed per acre, or enough feed to support seven to ten head of dairy cattle.

**Important to stock ranchers.** If you have any land absolutely worthless you can make it as valuable as your best alfalfa field by planting spineless cactus.

A short time ago a representative of the Department of Agriculture of Washington, D. C., called on me and was certainly enthusiastic on spineless cactus. He claimed it to be the finest stock food ever introduced, and a Godsend to the stock-growing sections. He said they had tested feeding cactus for a year on a herd of eighty dairy cattle in Texas without any food of any other sort, at the same time feeding another herd of eighty head on alfalfa, with no other food. He claims the results were the same. Both herds at the end



One year from planting; 50 tons to the acre.

of the year were in the finest condition imaginable—fat and sleek—and the dairy returns were so near a tie that it was impossible to tell which was the better dairy food. However, it must be borne in mind that as an economical and profitable crop cactus is many times more valuable, as alfalfa only yields five to ten tons per acre and must be cut, irrigated and handled regularly, while cactus will produce from 50 to 100 tons per acre after the first year, without water, and, if irrigated the same as alfalfa, double that amount, and one does not need to cut it only as he wished, to feed it. Then it can be cut and fed like corn. It comes up immediately, and in a few months it is ready to harvest another crop of 50 to 100 tons per acre. The stock must be kept off of it or they will eat it out, root and all. The largest ostrich farm in the world (situated in Arizona), having over 3000 birds, are preparing to put out 100 acres for their ostriches,

as it is an ideal food. They now feed alfalfa exclusively, but find cactus as good and not one-fourth as costly.

Cactus will prove especially valuable in feeding dairy cattle, as it will furnish a succulent food throughout the entire year, and an even flow of milk can be obtained.

As a poultry food it is unsurpassed. It has been proven in many places that poultry will leave alfalfa, lettuce and other green food for cactus.

Stockmen, poultrymen and lovers of fruit, you are missing a golden opportunity if you do not plant cactus. Sheep, cattle, horses, hogs and poultry are very fond of this cactus and soon get fat on it.

Cactus can be stored and fed as desired, but best fed as cut.

### EXTRACTS AND DEDUCTIONS FROM LETTERS.

Extracts and deductions from report of Mr. Chas. J. Welch, near Merced, show in milk test, spineless cactus vs. alfalfa, decidedly in favor of cactus. In ten days the cow ate 1560 pounds of cactus, 156 pounds per day. She gave 58 pounds of milk or  $7\frac{1}{2}$  gallons per day while fed cactus. Before he began feeding cactus she averaged 38 pounds of milk or a trifle over  $4\frac{1}{2}$  gallons daily. A difference of nearly 3 gallons of milk per day in favor of cactus. At the rate he fed cactus, based on a yield of 200 tons per acre, one acre of cactus would feed seven cows one year while one acre of alfalfa will do well to feed one cow a year. Difference in favor of cactus of seven to one as food, while it will produce about twelve times as much milk, due to fact of feeding seven cows giving  $7\frac{1}{2}$  gallons per day as against one cow giving  $4\frac{1}{2}$  gallons per day on alfalfa. He further states the cow always ate it readily and left alfalfa hay for cactus. Same results noted on other cattle. He also fed it daily to hogs, which ate it readily. He says further that the condition of the cow was notably improved on cactus; says the greatest gain per day was 27 pounds or  $3\frac{1}{2}$  gallons, while the average for 12 days' gain of  $25\frac{3}{4}$  pounds, or over 3 gallons per day. The report from which the above was taken was a sworn statement made before Mr. Freeman, a notary public of Merced County.

The following statements were made by Robert Hind, millionaire sugar planter and rancher of Honolulu:

## CATTLE THRIVE ON DRINKLESS RANCH.

### Animals on Millionaire's Place in Hawaii Don't Know Taste of Water.

I have horses on my ranch that do not know what water is, and will not drink it if it is brought before them. They have never tasted water. I have good fat cattle that have never seen water and would not know how to act if water touched them. I have other cattle that I have imported from the United States which have not tasted a drop of water since being turned out on my cactus pastures. They have lived for years without water and are as fat as any grass-fed cattle in the United States. They make just as good beef as you can get in any market.

## COMPARATIVE VALUE OF CACTUS AS STOCK FEED.

The following table shows the comparative value of the average cactus, alfalfa hay, and gamma, a typical range grass, according to analysis made by the University of Arizona, Agricultural Experiment Station:

Description.	Ash	Protein	Fiber	Nitrogen free extract	Ether extract
Cactus without fruit .....	19.91	6.48	10.22	61.48	1.83
Alfalfa hay.....	5.67	12.74	39.04	41.06	1.49
Gamma grass.....	15.11	6.99	30.31	45.63	1.96

P. S.—Its nutritive powers and food value equals per ton about three-fourths food value of alfalfa, is the report after analysis by Mr. Jaffa, head of the Department of Nutrition and Foods at the State University at Berkeley, Cal.

## ECONOMIC VALUES OF THE OPUNTIAS.

The plants are used for hedges or fences as well as for ornament.

The leaves as food for all kinds of stock, including poultry.

The fat young leaves make most excellent pickles and are a good and wholesome food when fried like egg-plant. They are also boiled and used as greens and are prepared with sugar, producing a sweetness similar to preserved citron, and may be flavored with ginger or other spices.

Cactus should not be watered until sign of growth is shown, except in very hot sections if planting is late. Very little rain is needed even on poorest soils.

The abundant mucilagenous juice from the leaves is extracted for mixing with whitewash to make it lasting when exposed to the weather.



The leaves are extensively used and most admirably adapted for poultices and as a substitute for hot water bags (thornless kinds, of course, preferred). Nothing removes swelling or pain more readily.

The fresh fruit of the improved varieties is unique in form and color, superior to the banana in flavor, and is usually sold at the same price per box as oranges, and can be produced at very little expense compared to producing oranges, apricots, grapes, plums or peaches, as there is never failure in the crop, which can be shipped as safely as other deciduous fruits.



Two years from planting; 200 tons to the acre.

Most delicious jams, jellies and syrups are made from the fruits.

The juice from the fruit of the crimson varieties is used for coloring ices, jellies and confectionery.

#### WHEN TO PLANT.

Unlike most other plants, they root best during spring or the heat of summer, and this is the time also to transplant them. They will thrive under almost any treatment. The leaves, blossoms, buds, half-grown fruits or any part of the plant will make roots and grow, even if they are only laid on the ground.

#### HOW TO PLANT.

They differ from nearly all other plants, as the cuttings must first be wilted before they will grow, after which nothing grows so readily. When received, place them in some warm, sunny place and allow them to remain a week or more unless the thermometer registers over 100 degrees,

then keep in shade till planted. However, in very hot sections plant as soon as received as they will wilt sufficiently after planting, after which they will readily form roots and start to grow anywhere, even on a board, a pile of rocks or the roof of the house, if you choose.

The cuttings may be easily and rapidly planted one-third to one-half their length under ground either with a spade or plow. They may be simply thrown on the ground and left to themselves if ground is moist and not too hot.

Prepare ground same as for other crops. If for large planting, plow a furrow four to six inches deep. Lean slabs against land side of furrow and then plow furrow back again, covering lower half of slab. Don't irrigate before plants start to grow unless ground gets very dry and unusually hot.

Except in cold sections, don't plant before ground warms up in spring. In warm sections from April to October is best time to plant.

No care need be taken to set them straight in planting. However, don't lean them so afternoon sun strikes too fully on the flat side, as it is apt to scald and injure them. Better to slant them edgewise toward the two o'clock sun.

In sections where severe freezing weather exists it is a good idea to plant very early in spring so the plant will have a chance to produce a new crop of leaves and harden up before cold weather, in order to withstand hard freezing. The very young growth will not stand much freezing. The mature slabs can be put out in cold sections to equally good advantage in the fall, after growing season is past; they then start root in the fall, but not young leaves that are apt to get frozen. By so doing the slab is in place ready to start growth as soon as spring comes, and by the succeeding fall the young growth is fully hardened and resistant to quite severe cold. I have seen some of the ones I offer that were not injured by cold when the thermometer registered below zero.

The cactus must, of course, be fenced in, the leaves to be fed to the stock and poultry when most needed. In countries where great numbers of valuable stock are lost by unusual drought, the spineless cactus will be of inestimable value, and will also without doubt prove of great value in less arid countries as a common farm or orchard crop even on the best agricultural soils, but more especially on barren, rocky hills and mountains and gravelly river beds, which are of no use whatever, not even range for cattle. It will grow where too dry for any other feed.

### DISTANCE FOR PLANTING.

For stock feed, they should be planted about three or four feet apart in rows and the rows should be about seven or eight feet apart, requiring 1500 to 2000 per acre.

I have had spineless cactus produce the first year, from single-rooted leaves, planted about April 1st, an average of over 60 pounds per plant, yielding at the distance planted ( $2\frac{1}{2} \times 5$  feet) at the rate of over 100 tons of forage per acre. This same field yielded at two years of age a crop of over 200 tons per acre without irrigation.



Fruit from a 2-year-old plant.

### WHERE TO PLANT.

Plant wherever you wish them to grow—on rich, level land or the steepest, poorest, rocky hillsides; old river bed or rock piles—but their growth and succulence are greatly increased by good soil, some culture, and in very dry soils by one or two light irrigations each summer. In our desert sections the summer rain is ample even though only a light shower or two falls. By such treatment the fruit is greatly increased in size and quality, and the slabs for feeding are doubled in weight and succulence. Nothing responds more promptly to fairly good treatment. They will flourish almost anywhere except where it is too wet for anything else to grow.

Cactus can be grown close in along the coast of the United States from the Puget Sound country south to San Diego, in the great valleys of California, in a considerable part of Southern Arizona, Southern New Mexico, Southern Texas,

Southern Louisiana and all along the Gulf and Atlantic coast of the United States well up to South Carolina for about one hundred miles inland, more or less, according to elevation and other factors. In a general way this is the part of the United States best adapted for cactus culture.

### OTHER INFORMATION.

Cactus requires no irrigation. It is an excellent dairy roughage. Good roughage for cattle, and can be used for hogs, chickens, and especially sheep and goats. It can be fed in a green, succulent condition all the year. It is ready to be fed whenever necessary.

When alfalfa was introduced twenty years ago many wiseacres declared it was no food for milch cows.

What do they say now? Good, but cactus is better.

The new thornless cactus is as safe to handle and as safe to feed as beets, potatoes, carrots or pumpkins.

This variety of cactus has been a very common food for horses, elephants, camels, mules, oxen, growing and beef stock, dairy cows, pigs and poultry for quite a number of years in foreign sections.

The average product of a single plant is often 125 to 250 pounds per year after three years.

The Tapuna strain seems to be almost as hardy as the fig and will withstand moisture better than most of the others.

Spineless cactus produces three times as much as the horny ones, and can stand 5 to 10 degrees more freezing than the wild type.

Often the question is asked: Will it pay? Does anything pay? Some people seem to think that corn, wheat, potatoes, oats, barley, cotton, etc., pay. How many tons of hay, wheat, potatoes, etc., can be raised each season to the acre? Or, how many cattle can you feed with product from one acre? One acre of cactus will feed five to ten head. Do you not think it would pay?

### AS A FRUIT.

Cactus is a vegetable that grows fruit. One farm in San Mateo county is claimed to pay \$575 per acre for the fruit alone, also one near San Jose pays \$800 per acre. For the fruiting *Opuntias* eight tons of fruit per acre is found to be a common crop. By analysis they are found to contain about 14 per cent of sugar, besides a small amount of protein and fat. Some contain more of these, some less. Most of the improved varieties commence bearing about the third year from cuttings, when enormous crops are produced.



The fruit commands 10 cents per pound, wholesale, and produces more the third year than any apple or peach orchard ever will.

Some of the earlier varieties ripen in June and July. The later ones from August and throughout the winter. Most of them commence bearing the third year from cuttings.

Some of the fruiting varieties have yielded and will yield more fruit per acre, even the third and fourth year, from rooted cuttings than the best apple orchards will in ten years, and at one-tenth the expense, and, better yet, the crop of fruit is as certain as the return of the seasons, increasing in quantity each season with no cultivation and no care whatever except to pick and market when ripe or nearly ripe like other fruits.

The general practice to prepare the fruit for use is by brushing with a whisk broom or rubbing with a coarse cloth, then cutting a thin slice from each end through the skin, then slitting from end to end when the skin may be readily removed, leaving the solid flesh ready for use.

The fruit and also the leaves are sometimes served in various other forms for food by those who are familiar with them.

### WILL THEY RUN WILD AGAIN?

We are frequently asked: Will they run wild again when placed under desert conditions? Such an absurd and foolish question! positively no. No more than a thorny one will quit producing thorns if planted in your front yard. Has the well-known Burbank plum and several other of his wonderful productions introduced in all parts of the world in recent years shown a tendency to be different in any of the foreign countries? No; no more than a mule will grow horns on the desert.

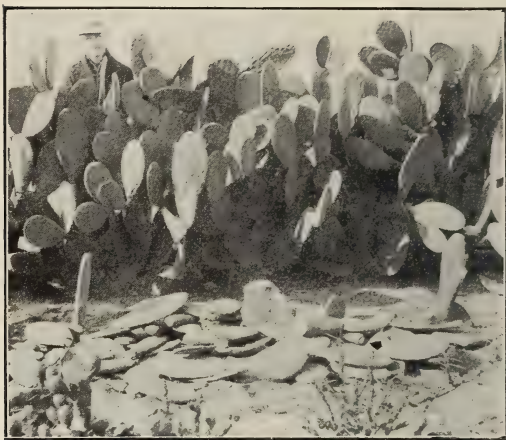
Everybody knows that trees, such as apples, pears, etc., cannot be raised from seed successfully. The same law holds true with the cactus, but, fortunately, it can be raised from cuttings in any quantity with the utmost ease. They raise themselves, for when broken from the parent plant the cuttings attend to the rooting without further attention, whether right end up, bottom end up, sideways, or not at all, but best results, however, are obtained by planting lower half in well prepared soil.

Unless Mr. Burbank and our government, as well as all our other best authorities be badly mistaken, the spineless cactus is destined to become one of the most useful of plants, furnishing abundance of food for man and beast in regions which have been regarded as too sterile and desolate for any form of stock-raising or farming.

### VARIETIES RECOMMENDED.

Varieties recommended by the Department of Agriculture of California as the best for stock feed and poultry:

Anacantha, Malta, Smith, Tapuna, Mission, Bianco, Morada, Colorado, White Fruit, Monelova, Watson, Trailing, Skelley, Corfu, Catania, Marin, Meyers, Gymnocarpa.



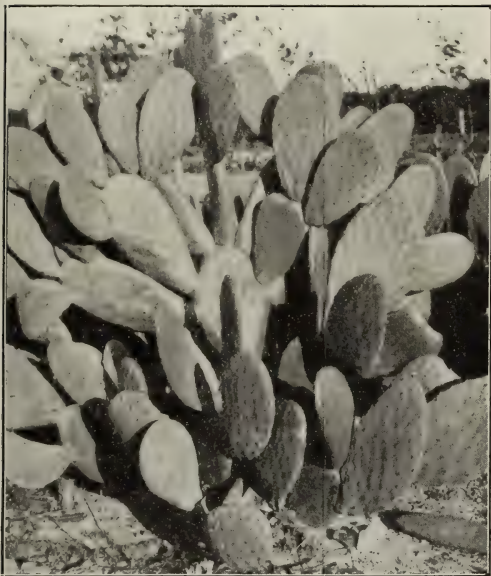
Three years from planting; 300 tons to the acre.

I can supply any of these, but advise the Anacantha strain as the best reasonable priced of any I have. It comes from the Mediterranean section, where it has been used for years as feed and fruit. It is one of the chief fruits of that section and is the best all round combined feed and fruit producer out of over twenty sorts I have on my grounds. I am preparing to plant 40 acres of this variety on my Arizona ranch for stock feed. Price of it is the same as other sorts except Burbank's higher priced ones.

The total labor expense of establishing and maintaining a plantation the first year would cost no more than from \$10 to \$20 an acre. After the first year no expense whatever is needed to produce a profitable crop.

The thornless ones will stand frost, flood, drought, heat, wind and poor soil as well, or bet-

ter than the wild ones, and will produce 100 tons of good feed where the average wild ones will produce 10 tons of poor feed. Several of these varieties will endure zero without injury. Old plants are very much hardier than the young, soft ones. In cold sections plant matured leaves early in spring or late in fall.



Three-year-old plant, weighing 300 pounds;  
450 tons to the acre.

#### SHIPPING.

Our cuttings are highly but safely packed so that they will reach you in good condition, transportation to be paid by purchaser.

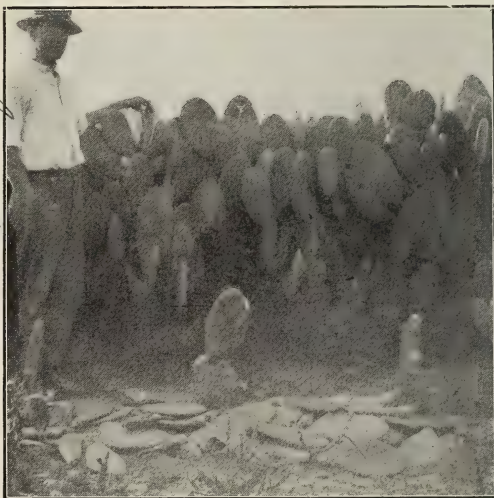
Please state whether you wish the cuttings sent by express or freight. Special rates are allowed on cactus and other cuttings and plants. If the order is small express is best. Freight is O. K. as they keep a long time.

We can supply plants in quantities and price sufficient to justify large plantings, and I predict that ten years hence it will be found in immense fields in our stock-growing sections. Up to the present time it was impossible to supply plants in quantities, hence no large fields. It is the easiest of all forage plants to grow.

Prices of our best and most valuable reasonably priced fruit and stock food sorts of the Anacantha strains: 20 cents each, \$1.50 per dozen, \$7.00 per hundred, \$50.00 per thousand, or, if priced according to weight, \$4.50 per hundred pounds, \$65.00 per ton.

The price of Burbank's more recent introductions vary according to kind, from \$1.00 to \$5.00 each; hence are too high priced for large plantings.

We can supply collections of these new sorts of his: 10 valuable new forage and fruiting sorts for \$8.00. Collections of 20 of his valuable new forage and fruiting sorts for \$15.00, or I can supply an assortment of 10 of the more common sorts of the Spineless for \$3.00; 20 sorts for \$5.00.



Showing a field approximately 1000 tons to acre at 5 years from planting.

*Cactus is double price quoted here*

## The New Strawberry "PATAGONIA"

This magnificent strawberry, offered for sale for the first time last season, is sure to be in great demand in all strawberry sections. It is not necessary to dwell on its possibilities further than to say that it possesses all the good qualities of the most delicate of all berries in California, the Longworth's Prolific, with many additional points in its favor; the vines are much stronger growers, the foliage is larger and stands more upright, and the berries have a delicacy of flavor and aroma combined with a firmness which is sure to make them popular, both for home consumption and marketing.

Burbank writes of it as follows:

"The berries grow on stiff branching stalks, which, while generally holding the berries free from the ground, yet do not expose them to the hot sun, so that in warm, dry weather the berries keep here in best condition a week or more on the vines. The berries are uniformly large, single berries sometimes weighing an ounce each at the beginning of the season, decreasing somewhat in size during the heat of midsummer, but are even larger in fall if the runners have been removed; fine scarlet color, with a handsome pale yellow flesh. The seeds are so very small as to be almost imperceptible.

"The berry, though firm, and a remarkably good keeper, is of most exquisite quality, melting in the mouth with a sweet pineapple, strawberry and cream-like flavor, and can be freely eaten by those who cannot eat the common acid strawberries now grown. The first to begin ripening and continues the longest.

Each, 10c; 75c per doz.; ~~\$3.00 per 100; \$20.00 per 1000.~~

### A WORD OF CAUTION.

In securing your supply of this wonderful new berry be sure of whom you get your plants, as no doubt, like other valuable new fruits in the past, some unscrupulous dealers will represent that they have the true **Patagonia**, and fill their orders from some inferior, cheap sort. We hope not, but such things are not infrequent. We have made arrangements with Mr. Burbank to handle this berry, and we secured our plants direct from the great originator, hence our stock is dependable.

**Visitors** to our experimental and plant farm welcome at all times.



## LIKE HONEY DEW is the HIMALAYA BERRY

Colorless and Rich, They Literally Melt in Your Mouth. You Can Have Them in Your Garden at Almost No Cost.

### TRY A FEW

It's a black, but not a blackberry. It's a new arrival from the north slope of the Himalaya mountains. For many centuries the natives of mysterious Thibet have been making wine and cordial of them, and only the recent invasion by British troops of the "Roof of the World," as this quaint land is called, has brought this delightful, luscious fruit to our civilization.

Enormous clusters of large-sized berries ripen all summer on this bush, making the Himalaya the most productive of any variety known. The flavor is sweet and of unusual richness. They have no core, and when ripe they literally melt in your mouth.

For pies and jellies the Himalaya berry is a perfect success, being ahead of any similar fruit. It jells easily, and either fresh or cooked is good for the sick, being an excellent regulator and having tonic and medicinal properties of unusual virtue.

The severity of their native climate has made the berries hardy and both the plant and the fruit will stand extremes of heat and cold better than will our domestic fruits.

It will be hard for you to realize what a treat is a dish of these new berries. They will be all the fad after they are better known and enough are grown in the United States to supply the demand.

Extract from Town and County Journal, July, 1908, by N. S. Trowbridge:

"In your Journal for June, H. S. Thornburg asks how to handle the Himalaya blackberry, and the reply by Mr. J. B. Wagner seems to me not as full as the importance of the subject demands. What I write is the result of four years' experience in growing this berry. Had I known what I now know, when I began, considerable work and some mistakes would have been avoided, and my desire is to give such information as shall save someone else the possible mistakes of a beginner.

"No proper comparison can be made between the berry and the Mammoth or other blackberries, as their mode of growth is different and their treatment should therefore be different. The Himalaya is a perennial, not an annual, like most berries of this character. The bearing wood will continue to bear for several years and must be cut out at intervals and new stalks grown to bear afterwards.

The new sprouts do not come up from the ground like other blackberries, but start from the one root, being branches just as much as the branches from a tree, and the roots will not throw up sprouts unless they are cut or broken by cultivation, etc. The fruit is also borne in a different manner from other vines. The bearing stalk, which is one or more years old, throws out the fruit laterals, which grow from sixteen inches to three



Himilaya 3-year-old, fully bearing, the like is seldom seen. This row has never been pruned.

or four feet long and bear immensely. Because of this long growth, the sprouts or stalks must be trained high, or the fruit would all lie on the ground. The vine is a wonderful grower and immense bearer and the roots should be set in rows eight feet apart and four feet apart in the rows. This is supposing that the ground is good and well fertilized and cultivated and conditions right for this berry. I have found that much the best and easiest way to train them is to string two wires

not less than three and one-half feet and five and one-half feet above the ground, with sufficient posts to properly support the vines, and allow about four stalks to grow from each root, training one on each wire half way to the next vine. This will give a continuous mass of berries the whole distance and is about as much bearing wood as the roots should support. Leave the laterals on the stalks, say six to twelve inches long, and you will simply marvel at the amount of the fruit. Cut off all other sprouts and low laterals, so that no vine will touch the ground when bearing.

"It is better to allow one or two new sprouts to grow each year, and these may then be used instead of smaller ones or of such as may die from any cause. The new growth needs frequent pruning or pinching back, for if one does not do so, no one could get through between the rows. This is one berry that the growers are not enthusiastic enough about. It can hardly be praised too highly, and so far surpasses all other blackberries that I know anything about, that I propose to dig up all the others and replace with this. The Mammoth is in no one thing but size to be compared with the Himalaya.

"It takes three years for the berry to come to its perfection; that is, the vines, and to be in full bearing. Strict attention is needed and at the right time, but no other berry that I have ever seen will so well repay the work put upon it as will this.

"The flavor and quality is unsurpassed, and it bears enormously and for a long time, beginning late and continuing till frost. If it is not picked one day it is good the next day or the next, though possibly the very ripe berries, which are luscious to eat, are not such good shippers.

"Some advertisers have stated that the vines may grow to sixteen feet in one season. I believe I could show a growth of fifty feet in one season if I should allow the vines to grow unrestricted."

Mr. A. E. Johnson, the leading berryman near Pasadena, states the Himalaya paid best of any berry he marketed. Easier to gather, more prolific and brought in market from 20c to 50c more per crate. He strongly advises the planting of it where one has good soil and looking for a money-maker. My own experience bears out the above opinions from these eminently successful berry growers. In November, 1909, Mr. Johnson took out all of his Phenomenals and substituted the Himalaya; he now has the largest field of the latter in this section.

The Himalaya has been found adaptable to a great variety of soil conditions and climate, the former having more effect on its productiveness than the latter. Trellised vines passed through a

severe winter last year in the Great Lakes region without shedding leaves, bloomed after frosts were over and bore immense crops of berries. Down in parts of Florida, where they have never succeeded in growing blackberries, the Himalaya is doing remarkably well. There is a great future ahead of this berry in the Eastern States and lower South.



Himalaya Berry, 1 year old, with few 2-year bushes on end, showing how to trellis same. Train Himalaya, Mammoth, Logan and other berries of a trailing nature, thus.  
Do little or no pruning.

The accompanying illustration shows my method of managing this berry. Train it on a trellis about three feet wide and three feet high. In my judgment this is the best way, using posts with cross-arms three feet long every twenty feet, with four wires strung from one end of the row to the other. Anchor end posts securely, so as to avoid a sag in the center. Plant four feet in rows and you will marvel at the yield of fruit.

Now is the time to plant. Three bushes will produce all the berries a family can eat.

We have a supply of hardy plants, well-grown, well-developed specimens. If you want to be the first in your neighborhood to have Himalaya berries, order now.

Prices: Each, 10c; per doz., 75c; per 100, \$3.00; per 1000, \$25.00.

**Mammoth Blackberry.** New. Supposed to be a cross between the wild Blackberry of California and the Crandall's Early. Color deep red to black; enormously productive and exceedingly early; fruit enormous in size, and luscious.

Prices: Each, 10c; per doz., 75; per 100, \$3.50; per 1000, \$25.00.



**Gardena Dewberry.**

**Crandall's Early.** The standard early sort; grown more extensively than all others combined.

Prices: Each, 5c; per doz., 50c; per 100, \$2.00; per 1000, \$15.00.

**Dewberry—Gardena.** The best early sort in existence, being grown more extensively than all others combined in large berry-growing districts.

Prices: Each, 5c; per doz., 50c; per 100, \$2.00; per 1000, \$15.00.



**Iceberg.** A new white blackberry. Something entirely new, as large as the well-known Lawton Black. Large clusters of delicious snowy berries, unsurpassed in sweetness and flavor. Hardy and a sure cropper.

Prices: Each, 10c; per doz., 75c; per 100, \$3.50.

**Loganberry.** Originated with Judge J. P. Logan, of Santa Cruz, Cal., from whom it derives its name. This berry is unlike any other in existence, being a hybrid between the Raspberry and the Blackberry. The fruit is sometimes an inch and one-quarter long, dark red, as large as the largest Blackberry, and produced in immense clusters. It partakes of the flavor of both the blackberry and raspberry of a mild, pleasant flavor, delicious and peculiar to this berry alone; seeds small, soft and few; fruit ripens early, just after strawberries and before blackberries and raspberries. The vine or cane of the Loganberry grows entirely unlike either the blackberry or the raspberry; it trails or grows upon the ground more like the dewberry. The canes are very large, without thorns, but have very fine, soft spines; leaves more like those of the raspberry than blackberry. It is excellent for the table, eaten raw or stewed, and for jelly or jam it is without an equal.

Prices: Each, 10c; per doz., 75c; per 100, \$3.00; per 1000, \$25.00.

### BURBANK'S "PHENOMENAL."

#### An Improvement on the Loganberry.

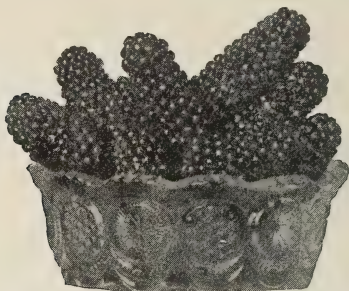
This is Mr. Burbank's latest berry triumph. He never permits anything to leave his hands until he has proved its merits. So this was not put upon the market until tested and sealed with approval by its great originator.

And, with another season's experience with it, we are frank to say that as the territory of its introduction and use is enlarged, it continually grows in favor. It has made for itself by its just merits, hosts of new friends within the past few years. To see it in its perfection is to desire it.

It is the result of a cross between the "Improved California Dewberry" and the "Cuthbert Raspberry." It takes the color and flavor of the latter and size and shape more of the former. Mr. Burbank describes it as "larger than the largest berry ever before known;" bright crimson raspberry color; productive as could be desired; most delicious of all berries for pies, canning, jelly or jams.

The berries grow in clusters of from five to ten, or more, and individual berries, under favorable conditions, have measured three inches in circumference by three and one-half to four the other. It's a surprise and delight to people when first seen, being so large and luscious. Mr. Burbank has recently said: "It is the best berry in the world,"

and the prophecy of others is that "It is the coming berry for the future." The demand for plants last year far exceeded the supply, and the demand now is greatly on the increase. This speaks for itself as to the quality and merits of the berry.



**Phenomenal. Ready for the table.**

It being easily grown and firm, it is a profitable berry for the fruit grower or small rancher to produce, for shipping to home or distant markets. Also, it's no mistake if one has a half dozen plants in the garden or back yard of a town or city residence, for by their productiveness they prove a delight for the table and yield great returns for the amount invested. We can supply the plants in dozen or thousand lots, as suits the buyer. Hardy anywhere. The vines grow as trailers, much resembling the Loganberry.

Set plants 4 feet apart, in rows 8 feet apart. Care for them same as for Loganberry, Himalaya, Dewberry or Mammoth Blackberry. Ripen here over a period of about 6 weeks.

To get actual size of the "Phenomenal," measure 2 inches lengthwise and 1 inch in width, then draw a circle around the points.

Prices: Each, 10c; per doz., \$1.00; per 100, \$4.50; per 1000, \$40.00.

### **The New Raspberry.**

#### **"THE SUPERLATIVE."**

The new Raspberry, "The Superlative," has been tried extensively, and has proved a great commercial success. It has revolutionized the raspberry industry in the commercial berry sections.

Its habit is different, as are also the leaf and fruit. The berry is shaped like the Cuthbert; though longer, in size it is very much larger—so large that the Superlative is often mistaken for

the Loganberry. The berry ranges from one to one and a half inches long. The cells are large, the seeds very small and brittle, and are almost unnoticeable in chewing, as they crush easily. The core is the smallest of any raspberry. In color it is crimson, but not a deep shade. The flavor is sweeter and richer—less acid than other raspberries. People who ordinarily do not eat raspberries enjoy the Superlative because of its aromatic, sub-acid flavor.

In shipping qualities, the Superlative has made quite a reputation for itself. It is a firm berry and has been shipped 48 hours distance without refrigeration, arriving in perfect condition for the market.

As a yielder it is very prolific. The canes grow very erect and the berry matures early. The ripening period begins with the earliest varieties and continues late, right through to the end of the season, from May to November. Where conditions permit, it fruits all the year, or perpetually.

The leaves are quite distinct from any other raspberry. They are very deeply wrinkled or corrugated, thus forming a protection against the ravages of the red spider mite. In the same patch the Superlative has protected itself from the mite where other varieties on either side of the Superlative have been stripped leafless. The canes are practically thornless.

Prices: Each, 10c; per doz., 75c; per 100, \$4.00; per 1000, \$30.00.

### ST. REGIS RED.

#### "Early Till Late."

New. Introduced two years ago as the most wonderful of all red raspberries. Fruit commences to ripen with the earliest and continuing on young canes until December if weather is favorable. Berries bright crimson, large size, rich sugary with full raspberry flavor. Flesh firm and meaty, a good shipper. Wonderfully prolific, the first or main crop equaling any red variety known. Canes stocky, of strong growth, with abundance of dark green leathery foliage. Every raspberry grower should test it.

Prices: Each, 10c; per doz., \$1.00; per 100, \$5.00.

### "CALIFORNIA SURPRISE."

Equal to or Better Than Superlative for California Growers.

California Surprise, the earliest and best red raspberry ever introduced in any country—in size, shape, color and formation it is nearly identical with the Superlative; the berry is as large and begins ripening fruit fully 6 to 8 weeks ahead of Cuthbert, making it the earliest red raspberry on the market by fully 6 weeks; hence, securing top notch prices of 25c to 50c per one-half pound box.

We are introducing it now from our grounds, where we have fruited it 6 years. It has produced heavy crops every year, while Red Cuthberts growing alongside have failed on several occasions to produce much or any crop. The canes are not so upright in habit as Cuthbert, inclining to be more weeping and bushy, producing berries in immense clusters on every limb from ground to tip; hence it is fully three times as prolific and many times as profitable. The fruiting season continues until long after the Cuthberts are gone; in fact, every month in the year, in sheltered places. It is destined to supersede the Cuthbert as rapidly as plants can be procured. Any one planting now will surely reap a golden harvest. No berry has ever before been introduced that will take the place in berry culture occupied by Cuthbert. Surprise being a long season cropper, is doubly valuable for both family, garden and market. Too much cannot be said in praise of it; it certainly is an agreeable surprise in every respect. It is the only red raspberry fruiting for Christmas.

We offer these at very low prices, considering the inestimable value of this new introduction now making its bid for public recognition.

Plant in any good rich vegetable soil; no special care required.

Prices: Each, 10c; per doz., 75c; per 100, \$2.50; per 1000, \$20.00.

**The Cuthbert.** A popular standard red variety for market and home. Bears in great plenty berries of large, deep, rich crimson. A good variety for shipping and stands the heat and sun well. An old time favorite.

Prices: Each, 5c; per doz., 50c; per 100, \$2.00; per 1000, \$15.00.

## YELLOW.

**Golden Queen.** A beautiful, large golden yellow berry, seedling of the Cuthbert and surpassing that variety in size, beauty, quality and adaptability. Canes hardy, of strongest growth, productive. Should be in every home garden, its beauty and high quality placing it at the head for table use.

Prices: Each, 10c; per doz., \$1.00.

For other varieties of berries, see general price list.

## GUAVAS.

The Guava is much sought for jelly making and preserving, and is much relished eaten out of the hand when fully ripe. Makes fine jelly and jams. A shrub that makes a handsome hedge and bears pleasant tasting fruit.

**The Strawberry Guava.** (*Psidium Cattleianum*.) Red. A fine, glossy-leaved shrub or small tree, which produces in abundance fruit about the size

of large strawberries; round, deep reddish color; the fruit is highly prized. From 2 to 6 plants of this luscious, semi-tropic fruit will be a valuable addition to any home garden.

Prices: Each, 25c; per doz., \$2.00; per 100, \$10.00.

**Yellow Strawberry Guava.** (*Psidium Lucidum*.) Similar to the common variety in habit of growth and shape of fruit. The fruit is yellow, somewhat larger, and of finer flavor. Considered by many vastly superior to the Strawberry.

Prices: Each, 35c; per doz., \$3.00.

**Lemon Guava.** (*Psidium Guajava*.) One of the finest of the Guava family; large, pear-shaped, yellowish fruit; the bush is susceptible to frost and should be grown only in the most favored localities. Bush tall, upright habit, often attaining a height of 20 feet.

Prices: Each, 35c; per doz., \$3.00.

**Eugenia Pitanga.** A small evergreen shrub producing a most delicious small acid fruit.

Prices: Each, 50c; per doz., \$5.00.

**Feijoa Sellowiana.** A beautiful evergreen fruiting shrub first discovered in Uruguay and introduced to France in 1894; of the family of Myrtaceae, and closely related to the well-known guavas, yet quite distinct from all of them in foliage, flowers and fruit, and especially in thriving without injury in much colder climates than any of the guavas. The tenderest shoots were not in the least injured during the freeze of January 5 to 8, 1913, where the temperature fell to 10 degrees above zero, and ice formed  $1\frac{1}{4}$  inches thick. It has proven to be hardy throughout nearly all of California and near the coast in Washington and Oregon, with temperature almost to zero. We advise planting it in these northern sections where the Guava cannot be grown. The foliage is pale glossy green above and silvery white beneath. Its large crimson and white flowers are very ornamental and the fruit, of the shape of a plum or short banana, averages about two inches long by one or more across. Skin green, tinged brown when ripe, thin but tough. Pulp amber color, juicy, sweet or sub-acid, having a flavor somewhat like the wild May pop or May apple of the Eastern states, with a most exquisite perfume, and by all pronounced most delicious. Ripens in November. Seeds smaller than those of the fig.

The Feijoa is not at all particular as to soil, thriving almost anywhere and withstanding severe drought and fierce winds uninjured, but, like other fruits, responds to good culture in the production of larger and finer fruits.

The fruit falls during October and while still hard is put away to ripen, which it does during the next month. This fruit can be shipped as readily as apples or pears and promises to be of great value to our state.

Prices: Each, 50c; per doz., \$5.00.



**Avocado.** (Improperly called "Alligator Pear.") We are certain that this is to become one of our great commercial fruits. It is not a fruit, in the common acceptance of the term, possessing no acid or sugar. It is more properly a vegetable butter, used principally as a salad. There is no



**A typical Avocado.**

product of tree or vine that commands as high a price as the Avocado. In Hollywood (now a part of Los Angeles) from one tree in a single year the product sold for more than \$400 in a wholesale way. The Avocado is a large, beautiful tree and should be planted for its beauty as an ornamental. The tree from which we grow our seedlings is on our own grounds and has produced over 1000 fruit in a single year.

Prices: One-year seedlings, each, 50c; per doz., \$5.00; per 100, \$40.00. Budded or grafted trees, \$2.00 to \$5.00 each according to size and variety.

**White Sapote.** A Mexican fruit (*Casimiroa edulis*), introduced to California by the early Mexican settlers. Several old trees in Santa Barbara have been in bearing for years, and the fruit is much liked.

The White Sapote has been shown to be much hardier than the majority of semi-tropical fruits. It withstands quite low temperatures and will doubtless succeed in milder portions of the Gulf states as well as the Southwest. In Mexico it is found at altitudes of 7000 feet, where the winters are quite severe. The tree is spindling when young, but in time forms a beautiful umbrageous head and is very ornamental. The leaves are palmate, glossy green, and sometimes quite large. Extremely drought-resistant, and will stand more neglect than almost any other tree we have.

The fruit is very similar in appearance to a quince, and of about the same size. The skin is thin, and surrounds a quantity of soft, melting pulp, very sweet and of a flavor almost impossible of description, since it resembles no other cultivated fruit. The seeds vary from 2 to 5 and are quite large in size. Our stock has been grown from trees known to produce the best quality of fruit only. Will grow in almost any soil.

Price: 75c each.

**The Cherimoya.** (*Anona Cherimolia*.) One of the four finest fruits in the world, the other three being the Pineapple, the Feijoa Seliowiana and the Mangosteen. Forty years of cultivating in California have shown it to be eminently adapted to this climate, which is, indeed, not unlike that of its native home, the highlands of Central America. The tree is a handsome one, with broad, velvety, bright green leaves, frequently deciduous during the winter months. It is sufficiently hardy to be grown wherever the orange thrives. While best suited to a light sandy soil, it can be grown successfully on adobe if it has good drainage.

The fruit is heart-shaped or oval, green or brown in color, and ordinarily about the size of a navel orange. The skin is usually covered with small conical protuberances, and encloses a mass of white, melting, custard-like pulp, in which twenty or thirty brown seeds are embedded. The flavor of the pulp is similar to the paw paw and is liked by every one. As a desert fruit the Cherimoya, when grown in a climate such as that of California, is without a superior. It ripens from December to March.

Our stock is grown from large, delicious fruits from hardy and productive trees fruiting on our own grounds.

Prices: Each, 25c; per doz., \$2.00; larger size, 50c to 75c each.

**Loquat or Japanese Medlar.** A beautiful ever-green shrub or tree attaining a height of 15 to 30 feet, bearing pear-shaped fruits of a pleasant acidulous flavor and of lemon-yellow color. Earliest of all fruits; very profitable to grow.

Prices: Each, 25c; per doz., \$2.50; per 100, \$15.00.

### CHINESE CLIMBING PLUM OR MAO-LI-DZI.

Mr. Luther Burbank, who introduced this new fruit, says of it:

"For many years I had been in correspondence with numerous stations in Japan, Corea and China regarding the various species and varieties of this plant, all of which are strong growing, hardy deciduous climbing or trailing shrubs or vines, remarkably free from insects and fungi, and unsurpassed for covering arbors, screens, walls and low buildings. The long slender vines are much used for cords and ropes and the manufacture of paper; the fruit is most delicious and much sought for by those who know it. It grows in clusters along the vines, often burying itself in loose earth or under leaves like the peanut.

"The fruit ripens in September and October, varying in size and shape, generally about like a plum in size and appearance with a thin brown downy skin like a peach, having the general appearance of an oval white fig or guava. The seeds, however, are much smaller and more like strawberry seeds.

"The flavor of the light green flesh is unique, but most resembling a strawberry, and, like the strawberry, is delicious to eat raw and excellent when cooked.

"After testing the various fruit bearing Actinidias extensively from Corea and the high mountains of Central and Western China, an extremely hardy, rapid growing variety, which bears most delicious fruit and is as easily grown as grapes or strawberries, was found in Western China among the mountains of an almost wholly unexplored region, thriving best in soils and locations where moisture is at hand.

The specific name of this species has not yet been determined, the natives calling it Mao-li-dzi, which means 'Hairy Plum.'"

Plants now ready for distribution. Vigorous, well rooted vines.

Prices: Each, 75c; per doz., \$6.00; per 100, \$30.00.

**LARGE FRENCH GREEN GLOBE ARTICHOKE.**

This is entirely different from the Jerusalem Artichoke, of which the edible portion is the tubers, and which, in this country, is used mostly for stock food. The Green Globe Artichoke is a delicious vegetable which deserves to be more generally grown in American gardens, and is worthy of the estimation which it has so long enjoyed in other countries. The plant resembles a giant thistle, and the edible portion is the immature flower head, which is boiled and served with a butter dressing same as asparagus.

Prices: Each, 10c; per doz., \$1.00; per 100, \$5.00.

**EUROPEAN HORSE RADISH.**

A recent introduction of the Department of Agriculture which will supersede the common kind because it is much stronger in growth and the roots grow considerably larger in size and heavier in weight. They mature earlier in the fall and are distinctly whiter in appearance and of finer flavor and quality.

This all-around superiority means money to the growers, especially to those that are the first to "corral" the market trade. Ready for planting.

Prices: Each, 5c; per doz., 50c; per 100, \$2.00; per 1000, \$15.00.

**GIANT BLACK WALNUT.**

For shade and timber. Originated by us; the most rapid growing hardwood tree in existence. Plant for shade, fruit and timber. If interested, write for our descriptive booklet on Walnuts. When ten years old our giant Walnut measured 3½ ft. in diameter. Three times as valuable as eucalyptus for lumber; higher priced than mahogany.

Don't fail to include a tree of this in your order or collection of shade trees. If you have land suitable for forest or lumber, plant either trees or nuts. They come true to seed. The nut is not very large, but of fine flavor. Hardshell.

Nuts and trees for large plantings supplied at reasonable prices. Investigation earnestly requested. Hardy in any climate.

Prices of trees: \$1.00 each; \$7.50 for ten; \$65.00 for 100.

Nuts for seed: 25c each; \$2.00 for ten; \$15.00 for 100.

Grafting Wood: 25c per foot; \$1.50 for ten feet; \$10.00 for 100 feet.

While we make the Giant Walnut a specialty, we can supply the following sorts:

**Santa Barbara Soft Shell. (Pedigreed stock.)**

Seedling from original trees at Santa Barbara. Trees of this strain begin to bear after three years, with no variation to notice in quality or nut. Make better tree than any other sort obtainable; decidedly preferable to grafted trees, as it has no tendency to get diseased at ground where grafted.



**Wagner's Giant Walnut as a Shade Tree...** At the age of 10 years the body of the tree measured  $3\frac{1}{2}$  feet, with a spread of foliage of 78 feet.

Ninety per cent of nuts grown commercially are of Santa Barbara strain.

Prices: Each, 35c; 10, \$3.00; 100, \$25.00.

We also have Santa Barbara grafted on Black. Each, 75c; 10, \$6.00; 100, \$50.00.

**Japanese Sieboldi**, the largest foliage nut tree in existence; leaves 2 to 3 feet long; nut flavor like butternut; very prolific. Fine for street or shade; bears young. Each, 75c; 10, \$5.00.

**Eastern Black.** Each, 50c; 10, \$3.50; 100, \$25.00.

**California Black.** Each, 35c; 10, \$2.50; 100, \$20.00.



## GENERAL PRICE LIST.

## BLACKBERRIES.

	Each	doz.	100	1000
Crandall's Early .....	.05	.50	2.00	15.00
Mammoth .....	.10	.75	3.50	25.00
Himalaya .....	.10	.75	3.00	25.00
Iceberg .....	.10	.75	3.50	.....

## DEWBERRIES.

	Each	doz.	100	1000
Lucretia (best late sort)....	.05	.50	2.00	15.00
Premo (good early).....	.05	.50	2.00	15.00
Austin (good early).....	.05	.50	2.00	15.00
Gardena (best early sort)...	.05	.50	2.00	15.00
Logan .....	.10	.75	3.00	25.00
Phenomenal .....	.10	1.00	4.50	40.00

## RASPBERRIES.

	Each	doz.	100	1000
Cuthbert (Red).....	.05	.50	2.00	15.00
Superlative (Red) .....	.10	.75	4.00	30.00
St. Regis (Red).....	.10	1.00	5.00	.....
California Surprise (Red)...	.10	.75	2.50	20.00
Golden Queen (Yellow).....	.10	1.00	4.00	.....
Cardinal (Red).....	.10	1.00	4.00	.....
Gregg (Blackcap) .....	.10	1.00	4.00	.....
Kansas (Blackcap) .....	.10	1.00	4.00	.....
Sonhegan (Blackcap) .....	.10	1.00	4.00	.....
Plum Farmer (Blackcap)...	.10	1.00	4.00	.....

## STRAWBERRIES.

	Each	doz.	100	1000
Brandywine, Excelsior, A-1				
and Klondike .....	.05	.20	1.00	5.00
Patagonia (new) .....	.10	.75	<del>2.00</del>	<del>20.00</del>

These are universal favorites.

## GUAVAS.

	Each	doz.	100	1000
Strawberry (Red) .....	.25	2.00	10.00	.....
Strawberry (Yellow) .....	.35	3.00	.....	.....
Lemon .....	.35	3.00	.....	.....

## VEGETABLE PLANTS.

**Asparagus** (fine two-year plants): Palmetto, Conover's Colossal, Columbian White, Bonvolette, Giant, Giant Argenteuil. Per doz., 20c; per 100, \$1.00; per 1000, \$5.00.

	Each	doz.	100	1000
Horseradish, European.....	.05	.50	2.00	15.00
Horseradish, Common Sort..	.05	.25	1.50	10.00
<b>Artichoke</b> , Large French				
Green Globe .....	.10	1.00	5.00	.....

**RHUBARB.**

**Crimson Winter and Wagner's Giant Seedling.** First size: Each, 35c; per doz., \$2.00; per 100, \$10.00; per 1000, \$50.00. Second size: Each, 25c; per doz., \$1.50; per 100, \$6.00; per 1000, \$40.00. 5000 at \$30.00 per 1000.

**Strawberry or Lorenzo, Linneaus or Victoria.** Medium size: Each, 15c; per doz., \$1.00; per 100, \$4.00; per 1000, \$30.00. Special price on quantity.

**Burbank Giant Winter.** Each, 50c; per doz., \$4.00; per 100, \$20.00; per 1000, \$150.00.

**Wagner's Giant Crimson Winter and Giant Amber Winter.** Each, 75c; per doz., \$7.50; per 100, \$50.00.

Five hundred at 1000 rate; 50 at 100 rate; 6 at dozen rate, on all sorts.

**Wagner's Giant Seed.**  $\frac{1}{4}$  lb., \$4.00;  $\frac{1}{2}$  lb., \$7.00; 1 lb., \$12.00. We sell nothing less than  $\frac{1}{4}$  lb. of seed.

**MISCELLANEOUS FRUITS.**

**Eugenia Pitanga.** Each, 50c; per doz., \$5.00.

**Avocado.** One-year seedlings, each, 50c; per doz., \$5.00; per 100, \$40.00. Budded or grafted, \$2.00 to \$5.00 each according to size and variety.

**White Sapote.** Each, 75c.

**Cherimoya** (small trees). Each, 25c; per doz., \$2.00. Larger size, 50c and 75c each.

**Loquat.** Each, 25c; per doz., \$2.50; per 100, \$15.00.

**Chinese Climbing Plum.** Each, 75c; per doz., \$6.00; per 100, \$30.00.

**Feijoa Sellowiana.** Each, 50c; per doz., \$5.00.

**Currents** (Red Dutch, White Dutch, White Grape, Fay's Prolific, Lee's Prolific, Cherry, Black Naples, Black Victoria). Each, 20c; per doz., \$1.75; 100, \$10.00.

**Gooseberry** Downing, Houghton, Josselyn, Oregon Champion). Each, 20c; per doz., \$1.75; per 100, \$10.00.

**WALNUTS.**

**Giant Black Trees.** Each, \$1.00; 10, \$7.50; 100, \$65.00.

**Giant Black Nuts for Seed.** Each, 25c; 10, \$2.00; 100, \$15.00.

**Giant Black Grafting Wood.** 25c per ft.; \$1.50 10 ft.; \$10.00, 100 ft.

**Santa Barbara Soft Shell.** Each, 35c; 10, \$3.00; 100, \$25.00.

**Santa Barbara Soft Shell grafted on Black.** Each, 75c; 10, \$6.00; 100, \$50.00.

**Japanese Sieboldii.** Each, 75c; 10, \$5.00.

**Eastern Black.** Each, 50c; 10, \$3.50; 100, \$25.00.

**California Black.** Each, 35c; 10, \$2.50; 100, \$20.00.

### SUGGESTIONS OF VALUE.

To have a constant crop of Blackberries, plant in order named: Mammoth, Crandall and Himalaya.

Dewberries—Gardena, Lucretia or Premo.

Logan and Phenomenal berries always welcome.

Raspberries—Surprise gives constant crop. None better. Yellow Raspberry is a delight to all. Try a few Black Caps.

Patagonia Strawberry is a new one. Leave the selection of the strawberries with us, if undecided.

Don't fail to plant a Chermoya, a Feijo Selowiana or a Chinese Climbing Plum. No garden is complete without them. Of course you will put out an Asparagus bed, some Horseradish, Rhubarb, and be the first in your section to have a few Spineless Cactus for show and poultry feed.

Don't forget the Walnuts for nuts and shade.

### TO INTENDING PURCHASERS.

We have nothing to offer except herein listed.

Things to Observe, Read and Study.

Six at dozen rate, 50 at 100 rate, 500 at 1000 rate, on everything listed in this catalogue.

Small orders may be sent per mail, parcels post, if desired, where possible. However, we always send better and larger specimens per express, and where possible put in enough extra to pay express charges. Express is very low on plants—less than one-third as much as on merchandise. The smallest charge by express is 25c. An express package is often cheaper than if sent per mail.

### PARCELS POST.

This new innovation of delivery of packages up to eleven pounds will go into effect January 1st. As this catalogue is being printed before that date, we are unable to give much detail as same is not fully worked out and will be unobtainable before about January 1st. However, we give a few comparisons, as near as we can, between express and Parcels Post. With the limited knowledge we can obtain we advise shipment of plants per express where there is an office, for following reasons: It appears to be, even on short hauls, as cheap or cheaper than Parcels Post. On long hauls it is very much cheaper per express than Parcels Post.

The express company is responsible for loss of plants if for any cause they are delayed and suffer in transit. Parcels Post is not responsible for loss of packages unless registered, for which they charge 10 cents extra. Even then the package may be delayed till ruined and, as I understand, not responsible for delay. I guarantee plants per express, where there is an office, to arrive in good

condition, but do not if per mail, unless registered.

You can pay express charges on arrival, while Parcels Post has to be prepaid. It is impossible to estimate accurately what an assorted order will weight; however, if you wish plants per Parcels Post, enclose 10 per cent extra with your order and we will return difference or send enough plants to cover it. This also applies on express where there is no agent and you want plants put off at your risk. The express company will do so where charges are prepaid.

In locations where express is impossible, the Parcels Post is a great convenience. Under ordinary conditions as a rule where plants are concerned, I fear Parcels Post is a delusion. Below I give some approximate rates, both express and Parcels Post, as applied to trees and plants, as nearly correct as I am able to secure at the present time. The express rates do not apply to general merchandise, which in many cases are double the express rate on plants.

	Ten Pounds per Parcels Post	Ten Pounds per Express
Up to about 50 miles .....	\$ .35	25c to 35c
Up to about 250 miles .....	.45	35c
Up to about 500 miles .....	.62	35c
Up to about 750 miles .....	.72	35c to 45c
Up to about 1000 miles .....	.91	35c to 50c
From Pasadena to Texas.....	.91	50c to 70c
From Pasadena to Florida.....	1.20	90c
From Pasadena to Chicago .....	1.02	60c
From Pasadena to New York .....	1.20	70c

You will note from above the advantage of express. I also wish to state the express rate is not restricted to 10 pounds at rate quoted. For instance, San Francisco, Sacramento and points near by those place are approximately 500 miles from Pasadena. The Parcels Post rate to these points is 62 cents for 10 pounds, while the express rate on 23 pounds would be only 35 cents, while sections closer to Pasadena get from 50 to 100 pounds per express for from 35 to 50 cents. This is as near accurate as we can give it at the present time. Read and study carefully. For definite information regarding rates to your address, inquire of your Postmaster or express agent.

Don't pay your express agent more than approximately the above rate on receipt of plants without protest. Then write me the facts in the case and I will take the matter up here for adjustment with the company; also, if plants are held in office without your being notified, advise me of same and if plants have suffered in delay on account of it I will refill the order. However, you must accept the box or it will be hard to collect

plants are 8 lbs by mail they are not governed by P.P. laws

damages from the company. We pack plants for long distance shipment so they ought to keep in good order two to four weeks, hence accept package no matter how long delayed, and, if injured, I will refill order or refund purchase price and collect damages from the company. We very seldom have any complaints of loss per express, and in nearly every case they have paid claim in a few days whether loss was caused by either loss of package or delay in transit.

Write name and address plain—we can't guess it.

A Certificate of Inspection with every shipment.

Set plants same depth they grew in nursery or one inch deeper; settle earth with water.

When unpacking see that all are labeled. Don't let roots get dry; plant or cover with moist dirt.

**Our Prices** will be found as low as consistent with high-grade stock; we cannot compete in price with cheap stuff grown for mailing.

In ordering please state whether substitution will be permitted, as we feel at liberty when no instructions accompany the order to replace with other sorts as nearly similar as possible.

A few words of explanation of the foregoing is, in our opinion, advisable.

It often happens that a variety of which we grow only a limited quantity is exhausted early in the season, and as it may be impossible to secure it from other nurseries, it is either necessary to cancel the order or substitute with another kind which is similar. In nearly all cases when we exercise our judgment we believe our customers will approve our desire to please them. Those not acquainted with the different varieties will do well to leave the selection to us, as we will send them only such varieties as we feel sure are adapted to their locality, or return money.

Our plants are healthy and free from fungus disease; our land does not encourage such diseases.

There is no let up in the demand for dewberry plants. If you have a patch of ground that is out of the way and hard to cultivate, plant it to dewberries. Take care of them one season and after that just mow them off after fruiting with a mowing machine and you will get plenty of dewberries. A couple of days before they begin to ripen cut off all the young wood that is in the way of pickers; it would be cut off later anyway with mower or pruning shears. They always bring a good price because of their unusual size. They come early, before blackberries.

We trim all blackberry and plants of like nature, except Himalaya, as above, leaving considerable old wood in to support young wood for next



year. Do it as soon as crop is gathered to allow time for new growth. In pruning raspberry plants when about two feet high pinch tops off to cause them to set fruit branches. After gathering fruit cut away all old wood and thin out young canes if too many.

Blackberry, like dewberry, raspberry, and other small fruits, should be planted in every garden, or every farm, also planted commercially for the home and markets. Quick returns, profitable. Most desirable as fillers in orchard for intercroppage.

Join with your neighbors, get up a club and get the benefit of thousand rates on all of which 500 or more of each variety are ordered. Each bundle being labeled, the division is easily made. Catalogs will be sent your neighbors, on request.

Special prices on large orders. Send a list of your wants for our lowest prices.

We offer you but a few of the choicest varieties and by growing them in preference to all others you will really double your harvest and your crop will bring a higher price on the market. We know this is so by experience on our trips through the different berry and fruit growing districts, especially if these varieties are properly cultivated.

**NOVELTIES.** It is our aim not to introduce any new varieties until we are satisfied that they possess merit that is worthy of recommendation. We test large numbers of varieties each year, few of them pass the critical test we give them and are therefore rejected. When buying from our list you may feel assured that every variety we catalog has good qualities to recommend it.

Each year finds us better equipped to handle our trade. This finds us with the best plants ever.

This is our twenty-first year. The past season has been the most successful in our history. At the present time we have more orders for spring delivery than ever before and inquiries for plants coming in from every state. It is a great satisfaction to us to know that the most of these inquiries are from our old customers.

While we exercise the greatest care to have our trees and plants true to label, and hold ourselves prepared, on proper proof, to replace any that may prove otherwise, and in case of error on our part, it is mutually agreed between the purchaser and ourselves that we shall not at any time be held responsible for a greater amount than was paid for them. The above covers and includes all guarantee of whatever nature, whether expressed or implied, and does not include trees or plants other than our own growing.

**PERTINENT POINTERS  
PERTAINING TO  
PROFITABLE PIE-PLANT  
PLANTING, PLAINLY PUT.**

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**PLEASE PERUSE,  
PRACTICE AND PROFIT  
PROPORTIONATELY**



I beg to say, the following pages contain the most important pointers on rhubarb culture, as set forth in my booklet entitled "**Rhubarb for Profit**," mentioned in front part of this booklet. I am sorry I cannot at present supply any more copies of same as the complete issue is exhausted and I have not the time at present to revise it down to date to get more printed. However, if there is any point on which you wish more light after reading these pages, please write and we will freely answer your queries.

## MIX BRAINS WITH YOUR WORK.

Find a first-class farmer anywhere. What sort of a man is he? A man who feels the necessity of more and better knowledge, even of the things he has studied most. Why does he feel this necessity? Because the simplest, every-day affairs on the farm are deep things. The wisest of men, the greatest students and investigators do not yet understand all that is to be known about the soil, how plants grow, about bacteria, about sanitation, about drainage. There is not a natural law that is fully understood. If, then, the best students do not fully understand these things where are the men who are unwilling to make a close study of them? They live on the surface of things, making but little more study, doing but little more thinking about the work they are at, than the animals about them. There are thousands of such farmers. The country constantly suffers from them. They suffer themselves, but don't know why.

Every one read and study before writing for information. In all probability the answer to your question is fully answered here.

Pictures speak stronger than words, hence for the benefit of parties who live too far away or who cannot spare the time to call and see for themselves, we print a few scenes from actual photographs for your benefit. Look them over and study them.

Others as well as ourselves harvested over thirty tons per acre in one season.

Others have also sold over \$2,000 worth of barb from an acre in one year. Any one can do it under proper conditions and care.

We have hundreds of letters from every section of the United States speaking of glowing success in barb.

Our Giant Crimson Winter and Giant Seedlings are hardy in any climate and pay better than any other known sort. Mr. Stilson of Lamanda Park put out in May 20,000 Giant Seedling. On December 6th he began picking a crop that yielded 8 tons per acre, only seven months from planting. He got \$1.25 to \$1.50 per box. They do extra fine in all Pacific Coast states, also in Idaho and Colorado, where it gets **real** cold. Also they do extra well in Southern and Gulf states, where no other sort will thrive.

My Giant Amber, Burbank's Giant and the Common Crimson Winter are not so hardy either in the Gulf states or very cold climates as my Giant Crimson sorts. These latter are hardy anywhere in the United States.

Easier to grow and less care and labor than corn or pumpkins. There are thousands of acres of common sort now grown near great Eastern markets where twenty years ago only small patches were seen. Growers there claim to make \$800 to \$1,000 per acre yearly. They say fortunes are in it for us in California if we can produce it during winter months, and the market is unlimited.

Plant any month of the year. September to June are best months, and even July planting will give good crop the following winter, as it begins bearing six months after planting. All reliable nurseries carry a stock of my Giant plants as well as seed of the same. If not, they can get same for you. Better still, order them yourself direct from me. Save a year or two by getting plants instead of seed.

Plant thick in rows  $1\frac{1}{2}$  by 5 feet, 5800 per acre. This makes more stems, more shade, less weeds, less irrigation, more protection from frost, also from sun, straighter and redder stems and many other advantages over planting farther apart.

The greatest expense is the first year, getting ground ready and keeping plants thrifty the first summer; afterwards it is the easiest crop on earth to care for.

This method should be followed in hotter sections. Don't remove tops during hot weather. It exposes crown to the sun and injury may result. If you do gather it during hot weather always leave a few leaves for shade. During winter or cool weather pick every stem that is large enough. Winter Rhubarb is like cucumbers—when big enough it is old enough. Pick Winter Barb any time you want it except in hottest wealth. It is different in this respect to common sorts, which cannot be picked without injury the first year.

No known disease ever bothers it. Occasionally one will die for unknown cause or if injured. No pest bothers it after it gets a good start. When first put out a few are occasionally injured by bugs and worms. Sulphur or any spray such as is used on other vegetables is effectual.

Don't experiment with old-time or common sorts. I have spent years at it. Tested thoroughly over one hundred different sorts; only a few are any good in our semi-tropic section. All of these that have proved of value are listed in this booklet.

Don't try it out with a plant or two, for they are apt to be forgotten or neglected. Try at least one hundred; then you will give it proper care and marvel at the results.

Yes, it does well in a young orchard, but if you think much of your orchard don't plant Rhubarb in it as you are very apt to dig up your trees later and plant it solid to barb. The best orange orchard does not pay as well as Rhubarb; besides you only wait six months for a crop of Giant

Barb, while it requires as many years and untold expense before you get a good crop of oranges. I took out an orchard of eight-year-old orange trees and planted to barb; am getting more every year for the crop than I would get in five years from oranges. Hence I say, don't plant in your orange orchard as you are apt to want to dig them out if you do. I began picking barb the



**J. B. Wagner and his Giant Crimson Rhubarb showing matured stalks. One year after planting this plant had yielded over 90 pounds of marketable stems.**

first of November. By December 10th I had my entire twenty acres picked over the first time. Prices were not high at first, but on December 10th it brought \$1.50 per box in San Francisco. Part of my field young plants gave  $7\frac{1}{2}$  tons per acre, older plants 10 tons, this picking netting me an average of about \$300 per acre over expense of marketing. The other two pickings will do much better and bring higher prices.



I would rather return your money than send plants if you don't take proper care of them. Give them good and proper attention and they will surprise the most skeptical. Failure is impossible where conditions are right.

Don't plant Winter Barb where rock or hardpan is near the surface. It will be O. K. for common sorts. Try Lorenzo or Linneaus if land is wet or cold and poorly drained. I don't want to see any one fail, hence this advice.

Personally I prefer a location between the coast range of mountains and the ocean. It is cooler and more fog in summer, and warmer in winter. However, there is fine land any place in California as well as many other sections suitable. Good land, water, well drained soil and not too cold, are the essentials. You probably have them near where you live.

My Giant strains are twice as valuable for forcing in cellars, hot-houses, etc., in cold sections, as sorts now used in Eastern states or cold sections. They never stop growing when moved indoors during winter if temperature is kept above freezing point. This hothouse stuff brings from 25 to 75 cents a pound; hence one can form some idea of the enormous profit there is in Rhubarb during winter, when it can be grown cheaper in California than any other crop and a much better quality than the hothouse kind grown in the East. It ought to bring readily 8c to 10c per pound in train lots in any of the Eastern commercial centers during winter months when little stuff of vegetable nature is obtainable. I don't believe the supply will ever equal the demand once it is well established, same as oranges. Twenty-five years ago not a carload had been shipped East. Now the output is 35,000 to 40,000 cars annually. Ten years ago celery was grown only for local trade. In 1908 they sent East 20,000 carloads. Same can be said of all sorts of fruit and vegetables—and will be said of Rhubarb in a very short time. I have every confidence in this assertion. If in doubt about location, please write detailed description of land, and if in my judgment you are apt not to succeed I will advise, and would prefer you did not plant. It is not the question of the sale of a few plants so far as I am concerned, so much as it is to see the Rhubarb industry become a leading factor in California, as it has become in the East.

When in the East, in 1907, I talked with growers and dealers. They all claimed that if we could produce it in the winter it would be far ahead of their returns. Some claimed they made as high as \$2000 off a single acre from their spring and summer crop; some claimed to have raised thirty tons per acre during the season, which, they say, continues till frost. In September I saw it sell in markets in Boston, Philadelphia, Baltimore and

Washington for 3c per pound. At this rate, computed on a basis of ten to thirty tons per acre, would be from \$600 to \$1800 per acre. It frequently, so I am told, sells in summer time as low as 1c per pound. Even at that price they claim it yields more and pays better and is harvested easier than potatoes at same price; less work, more returns, and surer crops. Usually the first pickings in spring bring from 10c to 15c per pound, hence the returns per acre average up to about \$1000.

A box 2 feet long by 8x10 inches holds 30 pounds net, which is standard Rhubarb box. Cost about 9 cents each. Some use apple boxes. They are too short for Giant Barb. We get boxes from Pine Box Company of Los Angeles or San Francisco.

In gathering leave all tops and bad stems in the field. We put all leaves between every sixth row and allow to remain all summer, when they can be plowed under. They smother all weeds and act as mulch and good fertilizer. We don't try to cultivate where leaves are left, as ground keeps moist without it. Too much needless work to remove leaves from field and then haul back later in shape of manure. Let them rot in the field. In applying fertilizer plow a furrow close to row, fill with manure and plow to cover same. Apply manure at any time you have it. The more the better. Every ton of manure will make several tons of barb.

Any sort of manure or fertilizer having lots of nitrates is good. Cow urine is worth as much to barb as you make from milk. Try it; you will be surprised. Dilute it, using four gallons of water to one of urine. Nitrate of soda is quick acting and one of the best fertilizers; 300 to 400 pounds per acre, applied in October or November, will increase the yield enormously; so will blood. Both act quickly. Grape pomace, the refuse from a winery, is better than horse manure or bone meal. Apply all you can get of it broadcast during early fall or after first picking. A covering two inches thick is none too much. If the pomace is fresh the alcohol in it will injure the stems that are ready for market; hence apply after stems are picked. It does not injure young, immature stems unless they come in contact with it.

Growers in barb sections throughout the East claim they can make good money at  $\frac{1}{2}$  cent per pound. If so, we can do pretty good at 3 to 5 cents per pound when we can grow from 20 to 30 tons per acre. I have grown over 30 tons of Giant per acre first year.

In the East during winter there are many acres grown under glass, especially around Boston and parts of Michigan. They say that when we can supply the demand there they will be forced out of business, as they cannot grow it in winter for less than 10 to 15 cents per pound, and at best it is not to be compared with our Western product.

Some people imagine we cannot produce barb as large as they do in the East. I have seen barb grown in all the large Eastern market sections and, while it is better than the common Crimson Winter, it is not much if any over one-half as large and fine looking on an average as my Giant strains.

Don't forget you can plant my Giant strains of Crimson Winter and grow it successfully anywhere on earth where common barb grows. It will yield more and better than the sort you now grow. in cold climates it comes earlier than any other sort.

Wash barb if dirty before packing. Always wet it before packing. It keeps better. Place paper both top and bottom of box.

One man and one horse can prepare and plant one acre, 5800 plants, in six days. If you have manure, apply before planting. If not, apply it at any time. Some extra fine land will produce a good crop or so without manure.

Rhubarb pie and sauce used frequently will often prevent sickness in both old and young. It is the best system regulator known. Give the family all they want of it. Cheap, economical and good. Saves doctor's bills. If you don't grow it, buy it or get the prepared barb of your druggist and use it often to keep your system in order. All druggists and doctors prescribe it.

### MEDICINAL PROPERTIES AND VALUES. BEST HEALTH FOOD KNOWN.

By Dr. Geo. W. Carey, Author of "The Biochemic System of Medicine."

Pasadena, Cal., Nov. 29.

Mr. J. B. Wagner—Dear Sir: In reply to yours to hand asking for opinion as to medicinal and health value of Winter Rhubarb. I gladly comply and herewith submit same. My experience with Crimson Winter Rhubarb has proven it to be a wonderful health food. An analysis of the stalks of this marvelous plant shows that two of the inorganic salts (or cell salts) of the blood predominate, namely, the phosphate of iron and the sulphate of soda. The two diseases that most afflict the American people are general debility, caused by a deficiency of iron salts in the blood and a deficiency of the cell-salt sodium sulphate in fluids of the liver, which causes constipation of bowels, the bane of 75 per cent of the people.

The color red, or crimson, in Winter Rhubarb is caused by the catalytic action of iron. The skin of red apples contains a greater amount of iron than the skin of white or light colored apples. Colors,

in the vegetable kingdom, are caused by certain rates of motion set in action by the mineral dynamos known as inorganic salts. The effect of iron motion in the vegetable world is red, hence iron molecules predominate in the skin or outer tissue of the Crimson Rhubarb plant.

Iron phosphate salts have an affinity for oxygen, and this vitalizing agent is carried into the circulation and thus to all parts of the human organism solely on account of the presence of iron in the blood.

The sulphate of soda is the chief salt in juice of the rhubarb, therefore it will be seen why rhubarb sauce is a good diet for the liver. Sodium sulphate regulates the supply of water in the human organism and in the physiology of plants. When there is a deficiency of sodium sulphate in liver fluids they thicken; the bile becomes sluggish and vitiated and constipation is the result. All so-called malarial conditions, chills and fevers, etc., can be traced directly to the lack of proper amount of sodium sulphate in bile and glycogen. A diet of Crimson Rhubarb will prevent constipation and insure one against all forms of malaria.

The word "malaria" is misleading; it is Latin for bad air. Chills and fever are not caused by bad air, but these symptoms are caused by a lack of sufficient amount of sodium sulphate to eliminate the excess of aqueous vapor (water) breathed into the circulation through the lungs during hot weather. The high temperature holds water in solution in the air and thus human blood may become overcharged with water and cause a deficiency in mineral that eliminates an excess of water.

A shadow cannot be removed by chemicals; neither can disease be removed by poisons. There is nothing (no thing) to be removed in either case; but there is a deficiency to be supplied. The shadow may be removed by supplying light to the space covered by the shadow.

The human body is a receptacle for a storage battery, and will always run right while the chemicals are present in proper quantity and combination, as surely as an automobile will run when charged or supplied with the necessary ingredients to vibrate or cause motion.

The cell-salts are found in all our food, and are thus carried into the blood, where they carry on the process of life, and by the law of chemical affinity keep the human form, bodily functions, materialized. When a deficiency occurs in any of these workers through a non-assimilation of food, poor action of liver or digestive process, dematerialization of the body commences, which has been termed disease. So disease is a deficiency in some of the chemical constituents that carry on the chemistry of life, and not an entity.

So symptoms, called disease, disappear or cease to manifest when the food called for is furnished.

Many invalids have been cured by the daily use of Crimson Rhubarb; others should be. Trusting, Mr. Wagner, that the above will, in part at least, bring to the attention of some the inestimable value of Rhubarb as viewed from a health-food standpoint, I beg to remain,

Yours sincerely,

DR. GEO. W. CAREY.

Pasadena, Cal.

P. S.—Comment on so clear and valuable an article as the above, coming as it does from the pen of one who is so widely recognized as highest authority on biochemistry, seems to be unnecessary, and we gladly give it space due to fact we feel it will be of great benefit and value to many.

J. B. WAGNER.

Extract from letter received from Luther Burbank, the famous plant originator and plant introducer:

Santa Rosa, California, Jan. 25.

Mr. J. B. Wagner, Pasadena, Calif.

Dear Sir: Your very interesting new circular regarding Crimson Winter Rhubarb, Giant Rhubarb and berries just received. I am very much pleased to know that you are pushing these valuable plants and I think you have not overstated the value of the Crimson Winter Rhubarb in any respect, and hope you will make well on it, which you deserve for your ability in pushing it.

I am also glad to see that you have my Himalaya berry which I introduced about twelve or fourteen years ago. What you have said about it is correct except I do not think they bear through the summer much, not until towards fall, just when other berries are scarce. The Himalaya berry originated with me from seed received some fifteen years ago. Most of the seedlings were of no account, but the one which I introduced, now called the Himalaya, was the best of all.

LUTHER BURBANK.



## GOOD SUGGESTIONS

If Rhubarb wilts after picking, cover with wet burlap and sprinkle barb in boxes. It will keep a month in ice box.

If you are undecided as to adaptability of your soil or location, write me describing degrees of heat and cold, drainage, facilities for water, etc.; also state section of State where situated and I will give valuable advice and suggestions.

The secret of success is good land, good location, freedom from killing frost (if winter grown), or if for spring crop in colder sections, a warm exposure for earliness; good drainage, lots of manure, plenty of water and a little cultivation, mixed in every case with common sense, good judgment and attention to detail.

Good medium-sized plants are best. Be sure you get the sorts adapted to your soil and location. Do not experiment, but accept the findings of the ones who have made it a specialty and know.

In the Southern States the common sorts are practically a failure. Winter and Lorenzo do extra fine where land is properly drained. There is no doubt but that new sorts originated in semi-tropical sections will do well in semi-tropical parts of the United States. This has been proven, as sorts from farther north only live for a year or two, while plants of Giant Winter, Strawberry or Lorenzo and even Linneaus (grown in California) do fine and are of long life. In these sections the same as in California and the Coast. It is advisable to plant any time from September to May in the Southern States as well as Pacific Coast sections.

Yes, I know you have the richest soil in the State, but it is not rich enough for Rhubarb without manure after the first year.

The growers in Oregon, Washington and the Pacific Coast have been slow to take advantage of this, the best paying crop ever introduced. In sections around Portland, Tacoma, Seattle, etc., it is confined solely to a few Chinese truck growers, who are making fortunes out of the local trade. They have not reached out, nor do they realize the fact that the East is anxious to take all they can produce, and at fancy prices. The yellow gardeners manure highly, which is the essential feature of barb culture.

The horticulturist and the gardener of the experimental station, Mr. George Coate of Corvallis, says it is one of the easiest things in the line of vegetables on earth to grow. Manure and judgment are all that are necessary when properly applied.

## GENERAL INDUSTRY

The magnitude of the industry has in the last few years in the East reached a point unthought of a few years ago, and little realized today. There are thousands of tons used now, where fifteen years ago there was scarcely thousands of pounds. It is as common on stands now as any other vegetables during the summer, and will be during the winter if the people on this coast wake up.

While these are facts, and facts only, as I have shown and can and will show anyone who calls at my fields, where all are welcome at any time, nevertheless comparatively few, all too few, will undertake the culture of Rhubarb. They will begin "with one accord to make excuse." As our friend, Luther Burbank, the best authority in the United States on new creations and innovations in plant life, said to me, show a man a good thing, then he at once casts about for some excuse (not reason) why he cannot go into it just yet. The first thing he says is, "I am from Missouri; show me." Being shown, he slips out of sight and goes back to the same old rut, following the line of least resistance. He allows his intelligent and progressive neighbor to reap the golden harvest, and in after years complains of his luck, and says "how lucky" his neighbor was. Yes, his neighbor probably was lucky in having intelligent parents, some of which parental intelligence he inherited and uses to the best advantage.

## NO OVERPRODUCTION

No, it will not be overdone for a long time. I have grown and sold more plants than all others on the Coast, and the supply is not sufficient, and it will not be possible to grow enough to cause overproduction for some time, even if such a thing were possible.

There are many living today who have seen the demand for tomatoes grow from nothing to one of the greatest of our vegetable crops. The demand had to be created, now the supply has to be grown. This is in a part true with barb, but the summer demand already exists. The palate is already accustomed to it, but not in winter. Hence we will have to introduce the fact that it can now be had at all seasons of the year. But this is only history repeating itself. What is a luxury one day becomes a necessity the next. Anyone who is used to "old style" barb, and who once tastes the Winter sort, will look on it as a necessity; and the ones who grow it, and help the infant industry along, will get on the ground floor, and reap the benefits.

The expensive method of greenhouse forcing in the past have always made it impossible for any but the rich to enjoy Rhubarb during the winter months in the frozen East. With the introduction of Winter Rhubarb it is now possible for all to enjoy it at a nominal cost.

In Detroit alone, where winter forcing originated, one writer states that tons are consumed. Yet very few who are not engaged in the work realize this fact, and many never even heard of forcing barb. This, of course, will all be changed when we can supply a better article from the Coast in winter and early spring.

See cut elsewhere showing how to cut leaf off, leaving one inch of ribbed part on stem. If done this way, it looks and keeps better, besides more weight is marketed. It is not necessary to tie in bunches unless for special shipment—merely pack loose in boxes of 30 lbs. each.

If it wilts before placing in box or has to set around a day or so, wet it and cover boxes with burlap so they are air tight, and it will soon stiffen up and be as fresh as ever. It keeps well in an ordinary ice box. I have kept several boxes four weeks and not a stem spoiled or wilted. Tell this to your purchasers.

The crops can be picked constantly if desired, or can be made in two pickings, winter and early spring, as it remains good two months after maturity before necessary to gather in order to save it; no other vegetable crop can be so treated.

The plant is never dormant, hence is at all times forming new crowns which at first produce small stems same as a young plant. These produce large stems for the following season.

Never permit seed stems to grow, as this causes a couple of new crowns to appear to every seed stalk. Cut or pull them off when six to twelve inches high.

Cultivate frequently during hot weather, but not deep, as ground will dry out as deeply as cultivated. A dust mulch is all that is needed. The time to plant is now; get busy or get left.

If properly done, it does not injure plants to gather stems. Pull and use whenever desired, but always leave the under-sized or unsaleable stems on the plant. During the hottest season, do not remove all the stems, as they shade the ground and protect the plant from hot sun and prevent it from being burned out.

It is not the purpose of this book to induce the farmers or truck growers to rush wildly into this enterprise, regardless of whether their location is adapted or not, but to show the way whereby many can make a snug sum with little effort by starting right and doing right. We hear it said on every side, "If it is such a good thing, everybody will go into it." Not so, friend. It is true this is a stock in trade argument universally used

by the weakling. He wants to be shown, is from Missouri, and will get in after the cream is gathered and his neighbors have become independent. Don't forget, ninety per cent of the people are of this class. The field is almost unlimited and it will be many years ere it is fully worked.

The same argument has been used since time began by those who were afraid that some new crop of fruit, grain or vegetable would be overdone. This class of people will never touch a thing till they see everybody else at it. We meet them every day—they are the ones that tell you how cheap they could have bought a certain piece of land or a corner lot a few years ago that is worth a fortune. The fact is, it was a physical impossibility for them to have bought it; they lacked the nerve and forethought. They will tell others in near future how much they could have made and how much their neighbor did make on Rhubarb—but they didn't think, etc.

Some would-be authorities are in the habit of calling any new epoch-working innovation, such as telegraph, telephone, phonograph, flying machine, etc., a fake, and their introducers fakirs. Also in the line of agriculture, tomatoes, cotton, flax, sugar cane, alfalfa, etc., have all stood the test of ridicule, but have made good. So with Winter Rhubarb. Thanks be to the Wizard of Horticulture, Luther Burbank, who has stood for more knocking than any man in his class the world ever knew. By whom? The Missourian. But he has shown them and have done more for humanity than any man on earth today.

We also find on every hand the man who says, "It isn't practical; it won't work." When McCormick first took his mowing machine into the field his neighbors stood around, or sat on the fence, remarking: "Mack, you are making a fool of yourself." "That thing won't cut grass." "You had better go home and get your scythe and cut grass like your dad did." Well, it did cut grass. Where is the scythe? Had these same wiseacres been sitting on the fence at the time of creation and watched the Creator take a rib out of Adam and create Eve out of it, they would probably have said: "Old boy, you are making a fool out of yourself. You can't do it. She will not work." But say, my friend, she did work, and don't forget she has worked ever since. These few lines of apparent sarcasm have their mission. For fear you can't see it, let me say that they are written not so much for your special benefit as they are for her special benefit and for her children, present and to come—posterity, if you will. Let me say further, I don't need your money and I don't want it unless you and she and your children receive adequate benefits. The saying is, "Everything comes to those who wait."

Some things do. The man who waited while the express train went by had an easy time boarding the freight train later and never caught up. Let me say, I have done considerable traveling and never rode on a freight train; have been in thirty-three States and territories, Canada and Mexico, with my family, and done all of our traveling by daylight. Besides, since I came to California I have been in almost every county in the State—and some of the adjoining States and territories—have attended a great number of State and four national fairs. Had I waited for things to turn up I fear much of the pleasure and benefit derived from travel would still be on the waiting list. I came to California with \$20 in my pocket, in 1886, a boy of twenty, without a relative in the State. I have not waited for things to turn up, but have turned things up; hence today don't care whether you plant or not, only that I have a desire to see all deserving ones better their condition and will do my part if you do yours.

## LEAD, DO NOT FOLLOW

It is just as easy to be a leader as a follower on the slow freight. It's up to you. While I fully agree with my illustrious ancestor, Solomon, that "there is nothing new under the sun," the fact remains that there are combinations in plant life that it remained for such as Burbank to bring out; combinations that were unknown to the world until within the last few years, but valuable to all mankind if they will but take advantage. Winter Rhubarb is one of these.

The history of Rhubarb is the most ancient of any food or drug product. It was known and was a matter of record 3000 years B. C., in the Chinese kingdom. From there it found its way to other sections. First to India, where we get most of the prepared Rhubarb used for medicinal purposes by druggists. At one time it was considered so valuable as a drug that the price was three times as high as opium. It was introduced into England and France in 1573, where it was first used as food or as a medicine in cooked form. Its first use as a food was in Queen Elizabeth's time.

There are many kinds of Rhubarb (or Rheum, as botanically known), from many parts of the world. The varieties now most commonly known are hybrids from Rheum, Rhaponticum, Rheum Undulatum, and Rheum Palmatum, and were brought to the highest point of perfection in England in early part of last century; hence the Englishman is to be excused when he insists on plants of the Victoria, this being the name of his favorite sort "hat 'ome in hold Hengland."



Before the war there was quite a trade in Rhubarb—as a wine plant, but high war taxes caused the industry to be dropped. Probably the world is just as well off. As a table vegetable it has become almost a necessity all over the civilized world. Its native home was in latitude about 50 degrees. At the close of the 18th century it was introduced into England, where it became acclimated by seed and hybridization. Now the mild climate of England produces it to perfection. Probably no section on earth equals England for common sorts. Rhubarb grows profusely in northern sections of the United States, as far south as North Carolina. With the more recent introductions, viz., Lorenzo, Linnaeus and Winter sorts, we can now grow to perfection in any section of the United States. From my own experience I have doubts as to any other sorts being successfully grown in the lower Southern States or our Pacific Coast sections, as I have tried over 100 sorts from every section of the world and these are the only sorts that have proven beyond a doubt that they will thrive in warmer climates; hence, during winter these sections must supply the goods for the rest of the country, and the above sorts are the logical ones to plant unless one cares to experiment.

## ESSENTIALLY A ONE-MAN CROP

One man can properly cultivate and care for forty acres or more, except he must have help to gather the crop. It will stand about three weeks in transit across continent, if necessary, in cool weather.

I guarantee all plants to arrive in good shape if sent by express, or will refill the order. The freight or express charges are not much. We aim to put in enough extra plants to cover these charges. Small plants sent by mail prepaid when desired. When long distance shipments are made we select choice light-grade and pack light, to insure safe arrival and reduce expense to lowest possible amount.

This booklet is the clearest and most concise thing of the sort ever published applying to barb culture on the Coast. There is one other that applies to Eastern conditions that is well worth your while to get. It is published by the Orange Judd Company, Lafayette Place, New York City. Price 50 cents per copy. If you are an Eastern grower, or want to grow barb by forcing in winter, you cannot afford to be without it. It is the clearest and most concise book ever published on Rhubarb. It does not mention the Winter sort, as this variety has been introduced since it was issued; nevertheless, it is well worth your while to send

and get it. It tells you all about how to force Rhubarb; how to use your cellars., in a way that will give handsome returns, and nice pin money for labor expended. Any little space in cellar can be utilized. A little thought will suggest some place where at least a small box can be placed in the cellar that with little effort will give several messes at Christmas time.

In pulling stems use care. Grasp them low down, place index finger flat on inner side of stalk next the crown, push finger downward between stalk and where it is united to the crown, and pull with a twisting motion. By so doing the stems come away without injury to the undeveloped ones in center of crown. If the center crown is broken you lose some good stems for next picking. Don't cut or break stems for market; they won't keep. If wanted for your table it is just as well to cut them, as there is then no possible injury which can arise. Always leave about one inch of leaf base on stem when trimming for market. Don't allow them to lay in field for long before cutting off leaf—they soon wilt if sun is shining—besides they do not keep as well. If they become wilted, wet stems before packing.

In sections where one has a local market they can deliver to customers in any manner desired.

## CO-OPERATIVE MARKETING

When shipping to markets, it is best to ship through some vegetable growers' organization, unless you have some reliable commission merchant to handle the goods. There is now a Rhubarb Growers' Association in Southern California, that controls ninety per cent of the product, and thus establishes prices, which assures success to the enterprise. As fast as justifiable there will be branch offices established in other sections.

In November the annual meeting of the Barb Growers' Association was held, new officers were elected, and the Board of Directors increased from three to seven. To give wider representation of members, and handle to better advantage the new plantings recently put out, they have decided to open a stall on the Los Angeles market to handle Rhubarb alone, not only for members but for any who may choose to consign who are not members, and thus control the supply and create demand in other sections, as fast as the supply will justify opening up new markets, etc. It is opportune to say here that there was not one who had planted recently, who did not join the association, or send in their names at this meeting. The proposition of the association is to charge all a regular ten per cent commission, the same as a commission firm does. If any surplus is left at the close of the season it is to be rebated back to growers.

The ideal soil for Rhubarb is a sandy loam or clay soil, naturally warm and moist. It should have good drainage, as land subject to long spells of overflow is a detriment and prevents winter growth, but permits good early spring and summer growth later of Lorenzo and such sorts. Heavy or hardpan soils must be worked deeply, and, the same as any other, must have fertilizer applied generously. No danger of overdoing the applying of manure. A hog delights to wallow in the mud; Rhubarb takes similar pleasure in manure. The grower delights to jingle the coin in his pocket. In order that he may have this privilege and may enjoy it fully, he must let the Rhubarb enjoy the pleasure of wallowing in the manure. When applying manure always keep in mind that every load returns about \$50.00 in barb.

## PLANTING AND CULTURAL DIRECTIONS

On receipt of plants, take them out of package and spread on ground, sprinkle them with water and keep covered with burlap and plant as soon as possible, trimming off all broken roots first. Plants should be set same depth as they grow, watered at once and followed in a couple of days with another irrigation, then keep soil in a well tilled, moist condition. Irrigate as often as necessary to keep ground moist. I find the best way to plant is to make a small light ditch with a hand plow or hoe just deep enough to carry a small stream of water. Run water through to moisten ground. Then have a man with a spade shoved in the ground and moved back and forth a couple of times like a dibble, making a hole large enough to admit plant. Have another man put plant in place and hold at proper depth till spade is run down again about three inches away from the plant and dirt pressed to plant. When thus planted turn water in at once to settle dirt around plants; then if any cavities remain around plants fill in with loose dirt and the next day or so irrigate again. When ground becomes sufficiently dry, cultivate or hoe your ground and ditch level. All future irrigating do in light ditches as close to side row as possible. Use great care not to set plants either too deep or too shallow. Have them when set in the ground level, so plant stands a very little, if any, deeper than it grew in nursery. If too deep they are apt to rot.

A liberal use of manure (10 to 30 tons per acre is preferred), thoroughly mixed with the soil, is greatly beneficial and sure to repay many fold for trouble and money invested. Repeat application every two years. Barnyard manure, blood, grape pomace, chicken manure or nitrate of soda preferred.

Rhubarb is a crop that responds more readily to manure than any crop known. Every fall apply a good dressing of manure or grape pomace. The best way to do this is to plow a furrow on each side of row and fill with manure and then cover by plowing. Furrow, shut and work land thoroughly. This can be done at any season of the year, but to get best results the following winter it is better if application of manure is made in September or October before rains come. Where good land, manure and water is found, coupled with intelligent culture, I have not heard of one who has not succeeded and most of these are putting out all they land they have. Where the above condition is to be had, plant Rhubarb, otherwise don't.

Fresh manure is worth much more than old, as it retains all the nitrogen and ammonia; manure piled up from three months to a year loses from twenty-five to seventy-five per cent of its value.

The value of grape pomace (which is the refuse from wineries), according to Prof. E. W. Hiltgard, of State University of Berkeley, compared with value of mixed barnyard manure, is: Barnyard manure, \$2.79 per ton; fresh pomace, \$4.34 per ton; old pomace, \$8.05 per ton. Thus you see, old pomace is worth almost twice what fresh is and almost three times same amount of mixed barnyard manure. From results obtained on my own grounds, I will say, as near as I can estimate, cow manure and fresh pomace are worth about twice as much as horse manure, while old pomace is worth about four times as much, and about twice as much as either fresh pomace or cow manure. The main value in pomace is due to excess of nitrogen it contains. But very few of the seeds grow and one is not bothered with weeds as in case with common manure. Work ground thoroughly by first plowing under, and prepare same as for crops of corn, potatoes, etc.; this applies to pomace whether used on ground before or afterplanting.

Light, sandy or gravelly soils need special care and more fertilizer than others, and to be irrigated more often. Humus is one thing apt to be lacking; supply it in the way of barnyard manure or grape pomace. Any cover crop, such as cow peas, vetches, etc., is fine. Humus is essential in any soil for almost any crop, especially barb. The above fertilizers, as a rule, together with nitrate of soda, and blood meal, if convenient or economical to use instead, are by long odds the best fertilizers for barb. The chief ingredient where fertilizer for barb is concerned is nitrogen, and the amount of nitrogen the fertilizer contains is the essence of life for barb, also asparagus, peas, beans and any other herbaceous crops.

Good stable manure contains all the elements of plant life. The older it gets there is a less per cent of ammonia and nitrogen, hence of less value. However, a ton of well-rotted manure is worth as much (or more) than a ton of fresh, but don't forget it took two or three tons of fresh to make the one ton rotted, hence don't allow manure to rot in pile if you can help it. Plow it under fresh. No herbaceous or any crop that is represented by foliage or root needs potash, but all grain or fruit crops do. Therefore don't look for large quantities of potash in fertilizer for barb. Use nitrogen on all fast growing vegetable. It gives them a start to outrun the worms, the same as potash develops grain and fruit.

Some dealers are supplying nitrogen at three cents per pound. Try a dose of it to hurry up some of your lazy vegetables. If you are skeptical, leave a part of the garden untreated, you will never do it again.

Pure horse or cow urine diluted two-thirds water applied close to any vegetable, will double the crop. Try it. It is almost all nitrogen. This is the chief ingredient in manure. When allowed to rot, most of this is lost by evaporation, etc.

The real trouble with some who do not grow good vegetables is they forget, they ought to post a sign at the head of the patch, "FEED ME." Then they would think of applying manure, etc. Rhubarb has often been dubbed the mortgage lifter—it is such.

## ACIDITY IN SOILS

Some soils have too much acidity to produce any good crops of vegetables. This can be overcome by using from five hundred pounds to a ton of air-slacked lime per acre, according to the amount of nourishment in the soil available. This process often doubles the crop. This leads some to think that the lime is a valuable fertilizer. It in itself is not. It is only a pass-key to locked-up ingredients.

As to how to determine acidity of soil. Get at a druggist's a small piece of blue Litmus paper; keep it dry until used. Irrigate the spot, if dry, where you wish to make the test. Lift a shovel of earth, lay paper in bottom of hole, put earth back on the paper for a few minutes. Take out and rinse in clear water. If badly discolored and dark purple color, use a ton of lime per acre. If only slightly discolored, five hundred pounds is ample. If only a little trace of discoloration probably no lime is needed, but more manure. This simple test has saved many a truck farm from abandonment, after all sorts of fertilizers were given up. Lime alone was needed. Wood ashes will act instead of lime, though not so good.

Test your soil for acidity with five cents' worth of Lithmus paper.

The use of nitrate of soda is good, especially in cold weather. It acts more quickly at that time than any other fertilizer. Apply from one hundred to three hundred pounds per acre, according to size and age of plants. Sow in drills around hill and cover over, or dissolve in irrigation water. Apply about two months before you expect to pick barb; apply every month during picking time.

Apply blood fertilizer in September if this is your choice of fertilizer. It is good till about the middle of the following summer. when it is almost exhausted. Nitrate exhausts its force much sooner.

Grape pomace, old, is my favorite fertilizer for combined cost and effect, being the cheapest and best, as I can get all I want for the hauling. Government analysis places its value at over eight dollars per ton. As compared with manure actual experience by myself has demonstrated that for rhubarb it is worth three times as much. It is mainly nitrogen. Apply broadcast or in furrows alongside of plans, or mix with manure and apply same as other fertilizer. However, if fresh is used, it should be spread broadcast and worked, as it is too full of alcohol and the fumes will kill, the same as sulphur fumes, the green top, but not the roots of any green grass or vegetable it may touch. This fact, noticed by many, has led to a belief that it was a deadly poison to land and plants, with the result that millions of tons of the very best fertilizer known has been permitted to go to waste. Apply annually, if possible, ten to thirty tons per acre and watch results. If fresh is applied to growing field of barb it will ruin crop of stems then ready to gather, but as in the case of frost, another crop is soon ready to pick. Hence the best time to apply fresh pomace is at the same time you make the first picking in fall or winter; in fact, this is a good time to apply any fertilizer.

Analysis of the roots of the rhubarb, according to government reports, shows about 91 per cent moisture,  $\frac{1}{2}$  per cent each of nitrogen and potash with a trace of phosphoric acid. The stems and leaves contain 92 per cent moisture, about 1-7 per cent nitrogen, 1-3 per cent potash and with a small amount of phosphoric acid. Such being the case, coupled with the fact that it is such a heavy cropper and gross feeder, one can readily realize why such fertilizers as have been mentioned are so essential and beneficial.

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Do not forget that we carry a full line of Berries, Small Fruits, Novelties, etc.



## FIELD JOTTINGS

No set rule can be made as to the amount of fertilizer due to different kinds of land. The lighter and dryer, or more sandy soils, require more, others less. Hence, ten to fifty tons per acre, barnyard or grape pomace; three hundred to nine hundred pounds nitrate of soda, or one to two tons blood, would be about right on different soils. Save all weeds, leaves or waste matter and pile in heaps to rot, or put in corrals for stock to tramp into manure. Never burn such stuff. It is surprising what an amount of such valuable material can be accumulated.

The best early pickings come on lighter, well drained soils. The heavier or wet, cold soils produce best as weather warms more in spring. This applies to all sorts of barb.

Cultivation is easy, due to the fact that where such a mass of foliage appears, few if any weeds will grow. Cultivate enough to work in manure, and keep ground mellow.

Plants are very hardy; however, best results are obtained where properly handled in planting and caring for afterward. This will be conducive of a quick growth, which is so essential in obtaining the tender, brittle stock so to be desired in rhubarb.

A deep, fertile soil is best. It is nonsense to expect rhubarb to do well on thin, dry soil, even with irrigation. Not that it needs deep, wet or soggy land; just a good, common-sense place for its growth.

Much has been said of sense and nonsense in times past about value of manure. For instance, when I came to California about twenty-four years ago, I was told on every hand that it was a waste of time to haul manure. I have known of sheep corrals in the northern part of the State covering over an acre of ground with manure four feet deep; have seen makeshifts and some pretty fair-sized barns moved because it was cheaper to do so than to haul out the manure; and have also seen the manure dumped in gullies to get rid of it. So much for nonsense.

The Santa Fe railroad runs near my place in Pasadena. There is scarcely a day but that I see from ten to fifty carloads of manure going from Los Angeles to the orange groves beyond. Lots of it going to Redlands and Riverside, seventy-five miles, to be applied on orange and other lands. So much for sense. It is costly, but look at results. It pays.

In some foreign countries there are no animal droppings ever lost. If by chance some should be found on streets, they are gathered up in any sort of box, sack or basket and carried home and utilized. In certain cities, instead of having to hire

men or machines to keep streets clean, this is let to the highest bidder, for often a large amount. Besides paying for the privilege the streets are kept clean and good wages made off the fertilizers.

To illustrate this more fully let me cite one instance. On truck farms near large cities in France and elsewhere, when a man rents a piece of land for truck farming for a term of years, he reserves the right to remove the top six or eight inches of soil when his lease expires. Why? Because he put most of it there in the way of fertilizer. There is one reason why we hear so much about the French farmer making so much off an acre of land, often \$1000 to \$2000 per year; he knows how to do it and does it. We can, and many are doing the same here in the United States, and rhubarb is the one crop that will and is doing it.

I have read a great deal and practiced a little on the line of liquid manure. This year I have had an experience which is astonishing. It is incomplete as yet, but as far as it goes is worthy of mention. At some later date I may give final conclusions, but now I can only give as far as I have gone. It is on lines similar to the common practice of liquid manure, only on a 99 to 100 per cent pure liquid basis. The experience is as follows:

Last June I had occasion to call at a small dairy near my place. The owner had just put in stanchions and cement floor in milking shed. I noted he kept all droppings piled to one side and had them hauled away every day. The urine ran off separately in a vat, which he kept baled out and sent daily with manure. Being inside the city limits he had to, as all should, keep his place in the best of order. In this case I saw a chance long desired, viz., to get fresh clear cow urine to test as a fertilizer for rhubarb. In June I got twenty-five gallons of the clear extract of cow and applied on one row of rhubarb having forty-two plants in it that had been planted twelve months and given good care. The ground had been manured with barnyard manure and grape pomace when planted, were well cared for and were looking fine. But note the results. I am going to give you a few facts and figures that seem incredible. Take time and pencil and figure it out. I will state it as it has developed to date, and you can prove the same if you care to make the test. Once you have tested the matter you will know from experience and fully realize the importance of it. I make these statements and give experience fully realizing this if they were not true, it would surely rebound to my everlasting disgrace and injury, due to the fact that there is hardly a day in which some one interested in my rhubarb and plant-breeding efforts does not call at my place and look same over. I would not, therefore, make false statements, as I am constantly interviewed by the

press in general and our agricultural papers in particular, who, by the way, cannot be induced to print other than facts as they believe them.

But to the point. I applied this cow juice in small furrows drawn close to the plants, and made small basins at upper side of plant, to hold about a quart. I then turned water in until it got through to lower end of row. I then shut off the water and immediately poured the clear urine in, which followed after the water and just reached the last plant, leaving a little puddie at each plant. I then worked the ground the same as at any other irrigation. This was repeated the last of August with another twenty-five gallons, making in all fifty gallons of pure cow urine. This was used on plants when only set twelve months. Along the side of this row was another having identically the same treatment, except the application of the urine. Results: On November 23, five months after first application, when the plants had only been in the field fifteen months, I picked the stems from this row and the one next to it, each row having forty-two plants. From the row treated as above mentioned I got 336 pounds of barb of marketable size, and from the other row 231 pounds of marketable stems. This averages from the one treated with the urine eight pounds per plant, being 40,000 pounds or twenty tons per acre at one picking, which at four cents per pound or \$1.20 per box, the price for which it was sold, makes \$1600. I will still have two more good pickings, which, I believe, will yield in the same proportion and give a net total for this row, an average per acre of \$4800. (This is based on an estimate of 5000 good plants per acre. I plant  $1\frac{1}{2} \times 5$  feet, which gives 5800 plants to the acre, allowing 800 to be accounted for as a few are sure to die or be of no account.) The other row where urine was not applied, produced a fine crop, due to the fact that it was planted as it should be and properly cared for, and the results were very satisfactory. This row, also forty-two plants, produced 231 pounds of stems, or  $5\frac{1}{2}$  pounds per plant at one picking, making 25,250 pounds per acre or twelve tons, 1250 pounds, per acre at one picking, which at four cent per pound, or \$1.20 per box, for which it was sold, made \$910 per acre at one picking. As there are still two good pickings to be made, it is safe to estimate for the full winter's crop a return at the rate of \$2730 per acre on this. This makes a difference of \$2070 per acre in favor of the field where cow urine has been used, at the rate of a little over 5000 gallons per acre. This is apparently lots of cow juice, but keep your pencil and paper handy and see where you can secure it, etc.

In the Farmers' Digest for October, 1909, on page 7, we find the following among a mass of valuable data pertaining to fertilizers, their uses and abuses, waste and conservation, taken from United

States and State Bulletins and statistics. (No truck grower can afford to be without any of these bulletins. Send to Farmers' Digest Company, Columbia, Pa., for sample copy of their paper.) Among other things it says: "A cow will produce forty or fifty pounds of solid manure and twenty or thirty pounds of liquid manure per day." Now, save this all by cement floors and drains and what do we find. Say twenty-four pounds per day means three gallons per day or 1100 gallons per year per cow. At this rate five cows in a year's time will create enough to apply as above, all that would be necessary for one acre of land. The value of which, as stated, when applied, would be worth at least \$2070 the first year, and possibly the same value the next. This means in plain figures a net income per cow, derived from urine alone, of \$414 annually. In another form it means one cow urinates three gallons per day, value about  $38\frac{1}{4}$  cents per gallon, or \$1.15 per day, or \$34.50 per month, or \$414 per year. This small item alone, if saved and utilized properly, will more than pay for cement floor and drain in the cow's stall, and feed and care for her, leaving all the milk and manure as profits; in fact, in many sections it will more than pay for the keep of three cows, or if cow is kept on this floor one-half her time (probably long enough) she will more than pay her board in urine alone, to say nothing of the other items she produces for the use of the family and market, as well as the market gardener.

Now to you skeptics and mathematicians, get your pencils and figure, then fix your tanks and save the most valuable product of your dairy or cow. Don't say it can't be done. It can be done. I am getting this dope now, and using all I can get. So will you if you ever try it out. The value of the urine is due to the fact that over one-half of the nitrogen in her rations goes into it, and a cow is usually fed on highly nitrogenous rations; hence as nitrogen is the chief food of rhubarb, one need not marvel at results as above.

Some people get as much for their milk as the urine is worth as fertilizer, some do not—save both products.

Well, I must leave off on the fertilizer question to give room for other material, but before I do I want to impress on your mind again the fact that manure and rhubarb must go together in generous proportions if best results are desired. Nothing the soil ever produced will pay or has paid as well.

In the cotton-rowing States it is a practice in some sections to use cotton seed as a fertilizer. It is good, but oh the waste. As one writer ably puts it, "Feed it to your stock first, and then use it for a fertilizer." A ton of it will produce several dollars in dairy products, and is one of the best

of feeds, besides after being fed, or "put through the animal," so to speak, it is still worth twice what it originally was as a fertilizer. Why is it people are so careless? Or is it that they don't know any better, but follow the example of earlier times? But say, write to your State experimental station, also drop a line to your Uncle Samuel at Washington, D. C., care of the Department of Agriculture, and ask them for their latest and most complete bulletin on fertilizers. Then study them, and follow out the suggestions. They are free and complete, and at least worth what they cost you—a one cent postal card.

Again, don't forget that if your soil does not seem to respond readily to heavy manuring, it may be suffering from too much acid. Don't fail to test with lithmus paper. If the test shows too much acid use lime, it will unlock the soil and give astonishing results.

A ton of stable manure contains about ten pounds of nitrogen, two pounds of phosphoric acid, ten pounds potash. If you had to purchase that twenty-two pounds of chemicals at the present prices they would cost just \$2.52. Hence stable manure is worth just this much per ton, besides the effect it has in loosening and permanently building soils.

All who live in sections where it is desired to force rhubarb during winter should write the United States government for their bulletin treating on the use of ether in forcing rhubarb. Many tests have been made at different times, showing a range of from six per cent to eighty-nine per cent more yield where etherized. Again, don't forget, if interested in forcing rhubarb, to send for "New Rhubarb Culture," by Morse & Fiske, for sale by the publishers, The Orange Judd Company, New York City.

## USES AND PREPARATION OF RHUBARB

Nothing is more appetizing or can be prepared in more ways than Rhubarb.

If stalks become wilted place in cold water over night, they are then as fresh and bittles as ever.

It requires very little water, cooking mostly in its own juice.

It requires but a few minutes to prepare and cook.

Crimson Winter Rhubarb has many advantages over all other varieties.

In color it is red, becoming a beautiful dark crimson when cooked.

It never has to be peeled, saving time and waste.

It does not possess the bitter astringent taste of the Eastern variety, its flavor being more like that of fruit.

It requires less sugar.

Owing to the short time in which it cooks (from 5 to 10 minutes) and there being no waste, a bunch of it will make a large quantity when cooked than a like quantity of the Eastern variety.



Unequaled for sauces, jams, jellies, piec, etc. No home complete without it.

It comes into the market in winter, making a welcome addition to the table of the Eastern consumer, at a season when the variety of fresh fruits is limited.

Use no water except where specified.

Try a Rhubarb pie. Rhubarb pie, like all pastry, is best the day it is made. The use of baking powder is recommended for all pies such as Rhubarb, pumpkin, berry or any juice pie. It makes a dryer crust as it prevents absorption of the juices to greater extent than common pie crust.



Rhubarb Pie No. 1—2 cups chopped rhubarb and  $1\frac{1}{4}$  cups sugar. Cook very quickly in a shallow saucepan with  $\frac{1}{4}$  cup of water. When cold, line a pie plate with paste, wet the rim, add the rhubarb and lay 3 or 4 bars of paste across, forming diamond-shaped spaces; put a rim about the pie, wash over with the beaten yolk of an egg and bake in a quick oven 15 minutes.

Rhubarb Pie No. 2—Beat together  $\frac{3}{4}$  cup sugar, a tablespoonful of flour and one egg, add a cupful of finely cut rhubarb. Bake with one crust. When done, sweeten to taste and cover with the beaten white of one egg and brown in the oven.

Rhubarb Pie No. 3—Make crust as for other pies; 1 cup rhubarb, 4 tablespoonfuls of sugar, small piece butter and cover with crust; bake 20 minutes.

Rhubarb Pie No. 4—Same as above, only use no upper crust. Sprinkle with cinnamon.

Rhubarb Shortcake No. 1—Stew pint rhubarb till tender. For making shortcake use  $\frac{1}{2}$  lb. flour, 3 oz. butter, 3 oz. sugar, spoonful baking powder,  $\frac{1}{2}$  pint water, small pinch salt. Bake in hot oven 20 minutes. Cut it open and put in rhubarb, cover with whipped white of one egg and drip sugar. Replace in oven and bake until brown.

Rhubarb Shortcake No. 2—Bake a common shortcake or rich biscuit dough in flat tins. When done split open, butter well and spread with stewed pie-plant; serve with cream and sugar.

Rhubarb Tart—Add  $\frac{3}{4}$  lbs. sugar, 5 eggs and 5 oz. of powdered crackers to 1 qt. of stewed rhubarb. After the rhubarb is stewed put through a sieve. The other ingredients should be mixed well. Use only a bottom crust and bake  $\frac{3}{4}$  of an hour.

Fried Rhubarb and Apples—Slice equal portions, add tablespoonful brown sugar, fry in butter.

Baked Apples and Rhubarb—Peel apples and remove core. Fill cavity with rhubarb, cover with sugar and bake in pan same as ordinarily.

Rhubarb and Tomatoes—Slice tomatoes, roll in flour, add  $\frac{1}{4}$  amount cut rhubarb, sprinkle tablespoonful sugar, a little salt and fry in butter.

Rhubarb with Cereal Food—Use equal portions, 2 tablespoonfuls of sugar, pinch of salt, equal quantities of water. Allow to boil 20 minutes.

Fresh rhubarb cut into small pieces, sprinkled with sugar and partially dried in the oven on earthen plates, then sun-dried, is excellent to cook in winter with milder flavored dried fruits.

Rhubarb Compote—2 lbs. rhubarb all prepared,  $1\frac{1}{2}$  cups sugar, lemon peel, 1 pint of water.

Rhubarb Charlotte—Wash and cut rhubarb into small pieces; place a layer of rhubarb and sugar in the bottom of a pudding dish, cover with a layer

of bread crumbs and bits of butter. Fill the pan in this way, leaving the crumbs on top. Bake  $\frac{1}{2}$  hour in moderate oven. Allow 1 lb. of sugar to 1 lb. of fruit.



One stalk of Wagner's Giant,  
enough for three pies.

Rhubarb Marmalade—Wash and cut up rhubarb; weigh and stew until tender; add sugar in proportion of pound to pound; cook slowly, stirring often, do not let it scorch—placing an asbestos mat under the kettie often helps. When the sauce looks clear and jellied it is done. Put in glass jars.

Rhubarb Jam No. 1—Boil together gently for 3 hours an equal amount of granulated sugar and rhubarb, adding the grated rind and juice of one lemon to every pound of fruit.

Rhubarb Jam No. 2—Cook rhubarb till soft, then strain and mix with equal parts of any kind of berry or fruit.

Rhubarb Sauce No. 1—Cut rhubarb into small squares, do not peel or mash. To 1 lb. of rhubarb add  $\frac{1}{2}$  lb. of granulated sugar and  $\frac{1}{2}$  pt. of cold water (never use hot water). Cook in an open vessel from 5 to 10 minutes, over a slow fire letting it simmer—never stir or skim. Pour into a flat dish and let stand until cool, and it turns a beautiful crimson color.

Rhubarb Sause No. 2—Take  $\frac{1}{4}$  as much water as you have finely chopped rhubarb and cook; add 1-3 as much sugar as rhubarb about 1 minute before the sauce is done; some people prefer to wait till the sauce is cooked and cold and then add the sugar. Try both ways and choose the method you prefer.

Baked Rhubarb—Bake slowly in earthen dish, sprinkle lightly with sugar, and just cover with water.

For making jelly, it is unsurpassed; it is superior to Loquat or Roselle.

No. 1—To make rhubarb jelly without waste, drain the juice from cooked rhubarb, measure and use the same amount of sugar as you have juice, and cook a little longer than other jellies. The fruit that remains after the juice is drained off may be canned for pies; if it fails to jell readily use a little lemon juice.

The canneries use it without stringing, simply cut into suitable pieces for cooking.

As a beverage it is especially refreshing. Cut into small pieces, sprinkle with ginger, cover with boiling water and permit to stand without cooking till cool. Use a cupful to a quart of water.

Rhubarb Wine—Mash rhubarb to a pulp. Weigh and allow one quart of water and one pound sugar to each pound of fruit. Mix well and turn into an earthen receptacle, where it should be covered with a cloth until it ferments, being stirred daily. When it has ceased to ferment skim and strain. Pour into a cask and let stand open for 24 hours; close and keep for four months, when it can be racked off into bottles, which should be closely sealed and put away on their sides.

Kansas Lemonade—Put a little juice of stewed rhubarb into a glass of cold water, sweeten to taste and flavor with lemon.

**Rhubarb Vinegar**—Wash and cut up rhubarb without peeling. Pound with a wooden potato beetle; measure and put in stone jar; to each quart allow one pint of water. Cover with cheese cloth and let stand in warm room ten days, stirring twice a day. Strain through cheese cloth, measure and return to jar. Allow one cup sugar to each quart of liquid. Add a few spoonfuls of water, dissolve over fire, cool and add to the contents of the jar. Cover again and let stand as before until it is a good, strong vinegar, then bottle.

**Rhubarb Sherbet**—Wash stalks and cut into inch pieces without skinning. Measure and to one quart put the same amount of water. Simmer until very tender. Add the grated rind of one lemon and three tablespoons sugar, stirring until the latter is dissolved. Cool and strain. Chill on ice before serving.

The great crying need of our farms, our families, our pockets, is more and better thinking, more and better attention to our work, a larger and better supply of knowledge. Today, in thousands of farmers' families, books on these live, vital questions go begging for a welcome. Reading, that such farmers ought to welcome as a starving man would welcome food, is refused entrance. Why? Because they have used their brains, their eyes, their opportunities so little that actually they are blind to the need of such knowledge.

No wonder that out of over 2,000 farmers, interviewed in the census reports, thirty-five per cent.—seven hundred in all—are not getting back expenses from their farms.

What ails these men? They are ignorant of the true conditions of things. They are hit, bruised, hurt, constant; they fail to get revenue enough; can't see why they do not get along better; but never in their lives, perhaps, has it occurred to them that actually they do not know enough about farming to do well in it. The President may organize a thousand commissions to look into and study the conditions of the farm life of the country, but what good will it do these men? It will not reach them until ten years from now, maybe, when it is all common talk. Why? Because they will not read and think, and become men, "knowing good from evil."—One of the main reasons you should read some or all the following publications offered as a gift to you.

Keep this book; it is valuable to both master of the ranch and mistress of the household. Read and study it. Refer to it often.

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Black Cactus for stock, poultry and profit.  
Plant Giant Walnut for shade and timber.

## VALUABLE PRESENTS TO FARMERS

Much has been said in these few pages of interest to planters and growers of rhubarb. Much more could and will be said—both in and out of California—that is of vital interest to the public. It is not in the province of any one man or set of men to do this alone. My advice and desire is to have you learn all you can pertaining to advance thought on agricultural lines. With this object in view I wish to introduce to your notice the best publications on these lines—giving subscription price of same per year—in order that you may be able to get benefit of some of these. I will send as a gift to parties purchasing of me Rhubarb plants at catalogue price where cash in full accompanies order as follows: Anyone sending \$5.00 for plants can select any 50c per year paper, which will be sent them one year free; or any \$1.00 paper, six months; or any \$2.00 paper, three months; etc. Anyone sending \$10.00 for plants can have the papers for double the time as above. The larger the order you send the greater length of time you get your paper free. In any case, you get credit for 10 per cent of order in any paper or number of papers you may select. Selection must be made at time order is sent. For instance, if you send order for \$50.00 worth of plants you can select \$5.00 worth of subscriptions from the following list of papers. Look the list over carefully and make selections of the ones you prefer. This discount can only be applied on subscriptions, as I want you to place some of these papers in your homes for benefit of you and the children to read and study—they are not premiums, but a gift to my patrons.

For example, say you select five \$1.00 papers one year, or four \$1.00 papers and two 50c papers one year or three \$1.00 papers and one \$2.00 paper one year. It matters not which ones you select or for how long. They are all good. I am a reader of every one. You don't know what you are missing if you are not. If you wish to see sample copy of any of them, write the publishers and they will be glad to send sample if you mention where you saw this. Read your paper, file it away, or better still, send it to a friend in the East after reading.

Farmers' Digest, Columbia, Pa., \$1.00 per year.

Pacific Garden, Pasadena, Cal., \$1.00 per year.

California Cultivator, Los Angeles, Cal., \$1.00 per year.

National Farmer and Stock Grower, St. Louis, Mo., 50c per year, \$1.00 per three years.

The Fruitman and Gardener, Mount Vernon, Ia., 50c per year, three years \$1.00.

Pacific Rural Press, 667 Howard St., San Francisco, Cal., \$2.00 per year.

Horticulturist, Tacoma, Wash., 50c per year.

Pacific Homestead, Salem, Oregon, \$1.00 per year.

Western Empire, Los Angeles, Cal., 50c per year.

Orchard and Farm Irrigation, San Francisco, Cal., \$1.00 per year.

Oregon Agriculturist, Portland, Oregon, 50c per year, three years \$1.00.

Rural Californian, Los Angeles, Cal., \$1.00 per year.

California Country Journal, San Francisco, Cal., \$1.00 per year.

The Western Farmer, Spokane, Wash., \$1.00 per year.

Northwest Poultry Journal, Salem, Ore., 50c per year.

Florida Agriculturist, Jacksonville, Fla., \$1.00 per year.

Florida Fruit and Produce News, Jacksonville, Fla., \$1.00 per year.

Suburban Life, New York, N. Y., \$3.00 per year.

Grizzly Bear, Los Angeles, Cal., \$1.00 per year.

Pacific Poultryman, Seattle, Wash., 50c per year.

American Fruits, Rochester, N. Y., 50c per year.

The Border, Phoenix, Ariz., \$1.00 per year.

Please remember to select your paper at time order is sent or no attention will be given.

## WINTER RHUBARB IN FLORIDA

(Copied from Florida Fruit and Produce News in Florida.)

The attention of our readers is invited to the letter published on page 3 of this issue of the Florida Fruit and Produce News, from W. L. Baldrige, of Winter Garden, who has made a successful venture in growing the Winter Rhubarb, introduced from California. Mr. Baldrige has given the Winter variety a thorough test under various conditions of soil and culture, and his experience amply supports our belief that this plant will prove to be one of the most valuable for cultivation as a money crop that has ever been introduced in our State.

Under the ideal climatic conditions of Florida, Winter Rhubarb grows continuously, and yields immense crops per acre. It can be gathered for four or five months throughout the winter and early spring, and every ton can be sold immediately, as soon as gathered. The markets North are waiting for it and are anxious to take it.



The grower of the plants we are engaged in distributing declares to us that anybody can grow it with ordinary care and plenty of good stable manure as a fertilizer. The fact that when once established Winter Barb needs no replanting, but goes on growing and increasing in size and productiveness for years, makes an acre of it of as much value, if not more so, than an orange grove. We cannot too strongly urge upon our readers the importance of giving this new money-making plant a trial. Get these plants in the ground as early as possible so that you may become familiar with their habits, then next fall set out as large a plot of ground as you are able to cultivate. Remember that those who are first in the field will reap the surest rewards.

## ENDORSED BY GROWERS AND SHIPPERS

### Testimonials from Successful Growers from All Sections

Mr. J. B. Wagner,                      Dunbarton, Cal., Nov. 26.  
Pasadena, Cal.

Dear Sir—Received your letter in regard to Winter Rhubarb. You covered all I wanted to know at that time. I now have a few other queries on which I would like to get more light. However, since receiving your letter I have talked with several large grocery firms in Watsonville and not a single one seems to know anything about Crimson Winter Rhubarb, but they all think a rhubarb that could be marketed at this time of year would be fine and pay handsomely, especially when other garden truck is becoming scarce. I then wrote our commission firm at San Francisco and the enclosed letter is self explanatory.

Respectfully yours,  
H. SHUMAKER.

Following is reply to above letter from this commission house. In January and February it sold at 10c per pound:

San Francisco, Cal., Nov. 23.  
Mr. H. Shumaker,  
Watsonville, Cal.

Dear Sir—In answer to yours of recent date regarding your plan to plant Crimson Rhubarb, we think your plan a good one, especially if you can have it come in here in the very early part of the year. The common rhubarb gets so cheap during April that it seriously affects the price of other rhubarb. We received some boxes of Crimson Rhubarb yesterday from Yuba City, Cal., which brought 6 cents per pound.

Very respectfully yours,  
L. J. HOPKINS CO.

P. S.—The above prices were obtained in San Francisco the same day I picked and marketed the crop of row mentioned elsewhere that had been treated with cow urine. Had I received 6 cents instead of 4 cents it would have made a vast difference in estimated returns per acre. The growers of this section are now (Dec. 10) sending barbs to San Francisco and getting 5c per pound for it.

Why, oh why, is it you people of the North will permit such conditions to exist? Have you no land suitable for rhubarb? Or are you naturally a back number and want to be shown, that you will let a little jerkwater town away back in country like Yuba supply the only barb sold in San Francisco at this time of year? Wake up, get busy, or Yuba City (which used to be called U. B. dam) will pick the plums and then you will say I. B. dam. Oh, say, brother, get busy or quit. Again we say, plant Winter Rhubarb; you miss the opportunity of a lifetime if you don't. Following we give the names of a few of the many who have planted extensively in the last three years. Every one is enthusiastic and putting out all available land they can. All have harvested crops from \$500 to \$1000 per acre first year. Get your plantings in while the field is new and become independent.

(Correspondence to the Town and Country Journal.)

Fruitvale, December 7.

Editor Town and Country Journal, San Francisco, Cal.

Dear Sir: Last spring I saw in one of the numerous seed catalogues that find their way into our home every year an advertisement describing Luther Burbank's latest production in rhubarb, and from the description thought perhaps he had something rich and rare, so thought best to send for a few roots. So I ordered a dozen, and of course expected to receive good, large roots, as large as my fist or larger; but imagine my surprise when they came, for I had a little bundle of roots about the size of a lead pencil. A few of them perhaps at the top were a little larger than a lead pencil, but all about that length, and I thought after paying 75c apiece for them, of the old saying that a fool and his money are soon parted. But, now, Mr. Editor, with this one season's growth the surprise has turned to the other extreme, for I want to say that I have been acquainted with so-called rhubarb or pie plant ever since I was a small boy, and I never saw anything to equal it in flavor, either for sauce or for pies. It is equal to, if not better, than any green apple pie, and I do not think that Mr. Burbank gives it justice in his description; and in regard to its growth, here is the greatest surprise yet: It was

slow to start, but such a growth in one season I never saw or heard of. In about four months we had pie plant galore. I had stalks in size from a broom handle to a pitchfork handle and from 18 to 23 inches long, and leaves that measured 3 feet 4 inches in length and 2 feet 8 inches wide. I took three of these stalks down to the Board of Trade rooms and they said they never saw anything to equal it. Then this first crop was taken off as fast as we and our neighbors could use it, as the second crop was already coming up. For a time I did not know what to do with it.

The second crop came on more vigorously than the first: in one hill or root I counted about 100 stalks and all the roots had from 20 to 45 stalks, all of good size. Mr. Burbank says it can be plucked eleven months out of the twelve, but I have yet to find when the twelfth month comes in: when I can't gather any it must be when it gets frozen up.

And now, Mr. Editor, you may think this is a glowing description of this wonderful plant, but if you have any doubts you are invited to come and see for yourself any time.

A. C. VAN HOUSE,  
2021 Mitchell street, Fruitvale, Cal.

Mr. John Lumpin of Oroas San Juan Islands, in Puget Sound, has made a fortune in growing rhubarb for the northern coast sections; in fact, most of the barb used north of San Francisco is grown by him. The season 1909 he marketed a little over 430 tons, or 860,000 pounds, off his field, at an average price of 2½c (earlier crop 10c) per pound for entire year's crop. This was loaded on small steamers landing at his place daily for it. This one year's crop netted him \$21,500. This looks like lots of rhubarb, but it is less than one pound per year for each inhabitant of the territory he supplied. He grew the common summer sort.

Barb must be handled properly, and in hot sections irrigated often the first year. Mr. A. O. Hayward of Coachella watered every two or three weeks, and reports fine success. It gets about as hot in the section where he lives, near the Salton Sea, as it does in any section of the United States. It should be watered when it needs it, and anyone used to plant life can tell when that time comes. It is best to irrigate in the evening in hot sections if the plants have little foliage, as the water occasionally scalds the plant when exposed too much, when it settles around them. Cultivate next day.

Mr. Leon C. Crandall of 1328 South Seventeenth Street, Lincoln, Nebraska, is also a successful grower of rhubarb. He tells me he has about one-half acre, from which he harvests \$500 worth of

rhubarb per year. The experimental stations in Colorado, Montana, Utah, Washington and Oregon report fine success with barb. They all recommend practically the same treatment.

Mr. Frank Temerson of Mercedes, Texas, writes on November 19, 1909, that the Crimson Winter does fine there; grows spontaneously and yields heavy. Mercedes is six miles from the Rio Grande river, and forty miles west of the Gulf coast.

## NOTHING PAYS LIKE RHUBARB

Under date of August 13, Mr. W. A. Lee of Covina writes and states that he thinks nothing pays so well as rhubarb, where good land and fertilizer is used. He was one of the first several years ago to put out a field of Crimson Winter Rhubarb. He has used, and is using, manure and blood as fertilizers, and says blood is the best fertilizer he has tried, applying about a ton per acre about August or September for best results. He states that on a small part, about one-fourth of the patch, he used what little horse and cow manure he had, and the plants came up fine. He stated that this patch was no good at all before he put on the manure, as it was light, sandy soil and badly used up, and would grow no crop of any sort. Before applying the manure the barb had never grown or amounted to anything, but after using the manure it was the best part of the patch. He sold from this patch, about three-quarters of an acre, eight tons of barb that year, shipping it to El Paso, Texas, and Arizona points, and receiving about four cents per pound net for it over expenses. He said he could do better by using more blood and manure. This shows what one man can do when he goes after it in the right way. His three-quarter-acre patch netted him over \$600.

Mr. Lee has also stated that at one time he had more orders than he could fill, and went to his neighbor, a Mr. Rogers, to get some barb. However, when he saw his patch he did not mention what he was after, as he couldn't use it, it being too small. He told his neighbor if he used manure he could make a success with his rhubarb. The reply was, "No manure goes on here," and he strenuously cursed the rhubarb business. He was only getting \$1.00 per box and paying freight besides. He should have received a much higher price, and many times the amount of stems from his field. This class of worker is found occasionally in every kind of business. His wife said she could make money out of barb. It is too bad such men do not let their wives do the farming, and they attend to the house, but they would probably fail worse indoors than out.

National City, San Diego Co., Jan. 20, 1911.

Mr. J. B. Wagner, Pasadena, Cal.

Dear Sir: On March 25, 1910, I got of you 2000 rhubarb plants and planted according to directions in your booklet (Rhubarb for Profit) with results that are more than satisfactory. I have already sold over 5000 pounds from these 2000 plants, bringing in market of San Diego over \$200. This I consider very good returns and I expect to get fully as much more before season closes—in all probably \$400 the first year. After planting from 2000 plants or at the rate of about \$1200 per acre first year. I have been in truck growing business all my life and have never grown anything that gives as great returns as this Winter Rhubarb, and I intend to plant my entire place to it as soon as I can arrange to do so.

Yours respectfully,

E. S. CRUMLEY.

P. S.—He reports in spring of 1912 his plants averaged \$2500 per acre. The above is similar to reports from many who read, study and plant according to our booklet.

Sunset City, Cal., Feb. 21, 1911.

Mr. J. B. Wagner, Pasadena, Cal.

Dear Sir: I would like 2000 more rhubarb, 1500 Crimson Winter and 500 Strawberry. I have had a good sale for all I could pull at \$1.15 to \$1.25 per box of 25 lbs., netting me  $3\frac{1}{4}c$  a lb., after freight, cartage, commission and boxes were paid for. Marysville takes it all. The yield will average about \$1200 per acre the first year after planting.

Would like to inquire when and how I can divide crowns? Some roots have 10 or 12 on; also if there is anything I can do to make it stop flowering?

I am still putting cow juice on. The people are beginning to sit up and take notice now. Thanking you for past favors, I remain,

Yours truly,

CHAS. E. BARKER.

Porterville, Cal., Feb. 22, 1911.

Mr. J. B. Wagner, Pasadena, Cal.

Dear Sir: In September last we got 100 Winter Rhubarb plants of you. They have done so well we have decided to plant extensively of these and write asking for your latest and best terms on same.

Let me know your price on Giant plants. We have been receiving  $4\frac{1}{2}c$  per lb. for what we have marketed.

Mr. Herne, of this place, is growing it quite extensively and shipping his surplus to Fresno. He seems to be doing fine with it.

Yours respectfully,

MRS. LAURA ROTH.

Porterville, Tulare Co., Oct. 26, 1911.

Mr. J. B. Wagner.

Dear Sir: You will be interested to hear that my rhubarb is doing fine. Have already sold twenty-five boxes. Will you quote me prices on your Giant variety, also Burbank's, and terms, and same for common Crimson Winter? I will plant another acre this spring if all goes well and install a motor in place of gas engine. Then I think you will not hear of my losing any plants. We need rain here now badly. Is there any danger of injuring my plants by cropping this season?

Faithfully yours,

B. HEARN.

Los Gatos, Cal., Feb. 2, 1910.

Mr. J. B. Wagner, Pasadena, Cal.

Dear Sir: Yours to hand and noted. I appreciate your offer and the possibilities of rhubarb as I have grown and handled it for some time. I had a fine market established for it. I could sell in San Jose 100 boxes per week, in Los Gatos 50 boxes per week and in San Francisco 5000 per per week, at fancy prices. However, my place is rented at present and I cannot plant till next fall, when I expect to plant all I can and later devote most of my place to rhubarb culture, as I know nothing will pay as well. Please quote your best price and terms for large plantings.

Yours respectfully,

M. WALKER.

P. S.—Mr. Walker planted in October, 1910, about 9000 plants, and expects to put out more later.

Artesia, Cal.

Mr. J. B. Wagner, Pasadena, Cal.

Dear Sir: I sold my ranch some months ago and on account of changing my postoffice I did not get your card in time to attend the Barb Growers' meeting, which I would like to have done. I am out of the Rhubarb business. Probably for ever, as I am not able to do such work, and since I am out I wish to withdraw from the association and, of course, resign my directorship, as only members can act as directors. I am a friend of the Winter Crimson Rhubarb and can say that I made more money from the same effort than anything else that I ever tried to grow. I have always helped what I could and would like to continue to do so, but I am not able to take part this season. If I should ever regain my health sufficient to be able to work or take active part, I think I should go after rhubarb and would come back to the association. Now please accept my resignation and proceed at once to appoint some one to take my place. My regards and best wishes to all the members. My health is some better than it was last year, but I shall have to keep more quiet in future.

Yours very truly,

C. R. HARRIS.



We have hundreds of letters commending Winter Rhubarb from colder sections such as Oregon, Washington, Idaho, Nevada, Texas, Mississippi, Arkansas, Virginia, Maryland, Kentucky, etc. In most part of the above sections it is too cold to admit of winter growth, but the plants grow right up till frost comes and start as soon as it warms up in the spring; hence you can gather all summer from earliest spring till frost. We here give one testimonial which is typical of many we receive from these sections:

Covington, Ky., Jan. 16, 1911.

Mr. Wagner.

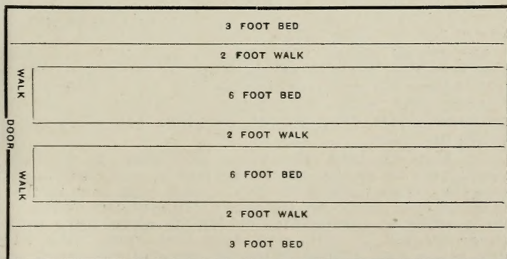
Dear Sir: The plants received of you early in season are growing nicely. Stems large enough to use. The cold does not seem to hurt it. I am very much interested in rhubarb and would appreciate your booklet on same. I am a teacher, but have been in poor health for some time and believe outdoor work will benefit me, hence my interest in rhubarb culture.

Yours respectfully,

ESTELLA M. SILVER.

Geo. Altender of Orofino, Idaho, writes Feb. 19, 1912, he is growing it under glass; began marketing in January; is selling all he can grow at 10c per lb.; has been growing it several years; can't supply the demand. Says the first year's crop from one-half his bed will more than pay cost of putting up the buildings and expense of same. Says he took 96 lbs. from one plant at three pickings; some of the stems weighed 2½ lbs. and were 35 inches long. He is building two more large glass houses for barb.

Following is diagram of one of his houses, showing how to plant. The walls 5ft. high, boards; top glass; walks sunken 1 ft. below level of beds.



He uses hot water heater. Any scheme is good as very little heat is needed even in cold sections. Set plants 1 foot each way in bed. If top is open during summer they can remain in beds for several years and produce handsomely. The sides also can be made in panels, to be removed in summer if desired.

Mr. F. D. Keeney of Turlock says it does remarkably well on his place and he intends planting another acre.

F. Lusby of Santa Barbara had experience similar to Mr. A. C. Van House, mentioned elsewhere. He adds that when he received the plants they were so small he wondered why there was no nursing bottle sent along. However, every plant has done fine. He was marketing barb in four months.

Mr. J. B. Wagner, Pasadena, Cal.

Don't charge my neglectful correspondence against me too seriously. I am screwed down pretty tight still. Hanging on like grim death to get through the next ninety days and have the field in shape with a full stand.

Have sold since April over 20,000 pounds of barb, all at 4 cents per pound f. o. b. Oceanside. Sold as high as 3000 pounds in one week. Am now selling only about 800 pounds per week. Have a business lined up for fall when grapes begin to go out, of about 10,000 pounds per week. So you may know that I have work cut out for me to wiggle through and get everything in shape within three months.

Am satisfied with my own marketing system and so will probably not look up the "rhubarb merchant" this season. More likely will be looking for more barb to fill orders with.

Hope to get up to Pasadena again in a few weeks and will come and see you.

Best regards to the family. Take good care of yourself.

Yours as ever,

REGINALD BLAND.

Mr. Bland planted 30 acres to barb in September and October, 1911, began picking in December, 1911. The above letter shows what can be accomplished by one man when he goes after it determined to succeed. His crop ought to yield him this year \$1000 per acre.

On May 15, 1912, Mr. Thos. E. Cruse, of Salinas, sent me a photo of barb patch planted eight months. He picked it twice and still had a fine crop about ready to market. The photo shows a lady holding some stems which he says were only three weeks' growth, and two feet long; says the one plant had at that time 74 large stems on it.

The average person does not realize that this plant is never dormant; hence cannot be planted in large clumps cut up same as old style sorts they grow in the East.

They are like cabbage and tomato plants inasmuch as nice, small plants do better than ones too old or large. I advise one-year plants. Our Giant subdivisions are made from old plants. We remove all eyes, making from 10 to 50 from each plant. These average about 1 inch square. We plant them under lath in May and June and keep irrigated. We usually average to get about one-half to make good plants first year, or about 25 per plant; besides we are able to make about 100 good plants from every hill we dug to divide; these we plant direct in field and put cuttings in lath house as above.

We note other successful growers all up and down the coast, but it would not make rhubarb grow a bit faster; besides it take up too much space, as we have already given names of enough to suffice.

Wherever we have exhibited, Winter Rhubarb has in every instance taken highest awards: St. Louis, 1904; Portland, 1905; Jamestown, 1907; Seattle, 1909; also at all California State fairs since 1903, at which time we made our first exhibit.

We have aimed in this treatise to answer all of leading questions commonly asked by intending purchasers. In case there is any further information regarding soil or other conditions desired on the subject, write us and we will be pleased to answer.

From now on I will offer prizes at all future State Fairs for best exhibit of Winter Rhubarb. First prize, \$50 worth of rhubarb plants; second prize, \$25 worth; third prize, \$10 worth. To all who compete and do not receive one of the above prizes, \$2.50 worth of plants will be given. This offer open to all growers of the State, regardless of where they secured plants.

Hence let every grower show his product. You may not get first, but you will get at least \$2.50 for exhibiting, more than enough to pay for exhibit. All you have to do is to send it in care of your county exhibit at the fair in September. The man in charge will do the rest.

Residence and Nurseries—On southwest corner Villa street and Sierra Bonita avenue. Take Laramanda Park car, get off at Sierra Bonita avenue, go north to Villa street, or take North Loop car, get off at Sierra Bonita, go south to Villa.

(Do not get off the car when it crosses Villa street as you will have to walk a mile, but follow directions as given; also, it would be much better to phone before taking car from Pasadena; then I will be sure to be there; otherwise people coming from long distances are apt to miss seeing me.)

**J. B. WAGNER**

Send for Booklet

# WAGNER'S GIANT BLACK WALNUT

The Money-Making Timber of the Future

*Three times the value of Eucalyptus for  
rapidity of growth and its timber*



"He who plants a tree, not only plants a  
hope but a competence for old age "

---

J. B. WAGNER

PASADENA, CALIFORNIA